ARCHITECTURE

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Classic or What?

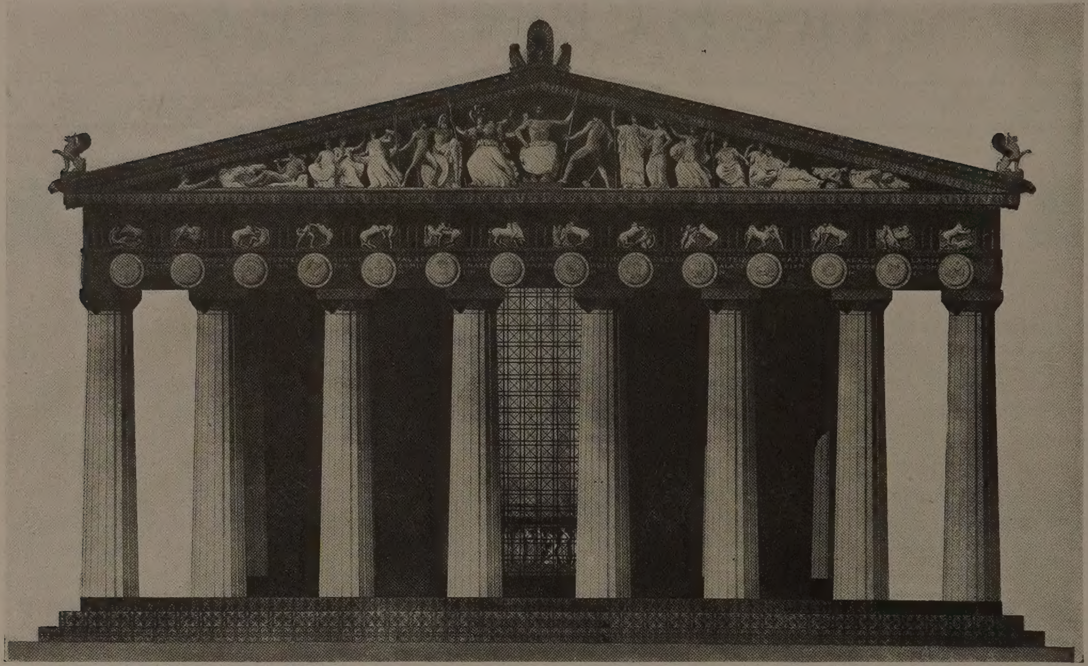
By Egerton Swartwout

SOME weeks ago, or some months ago, I forget which, but it really makes little difference except perhaps to the editor, I found in my morning mail a letter from ARCHITECTURE. It was not, as I had hastily inferred, a polite reminder that my subscription was somewhat overdue, but was a letter asking if I really thought classic architecture was best suited to present-day design, and if I did think so, would I give my reasons, if any, in about fifteen hundred words. Now this is a question, one of the many questions, that cannot be answered by yes or no. It falls in the category of the classic question: "Have you stopped beating your mother-in-law?" If I said yes to the editor's question the reply might be that the Tel. and Tel. Building was a modern building and then—well, it all depends on what the word classic really means and what type of modern architecture is meant.

My dictionary, or rather my secretary's dictionary—a handy little volume which I occasionally consult when I want to know how colonnade is really spelt, because I never can remember whether it has two *l*'s or two *n*'s—this little *vade mecum*, then, says that "classic is a standard work of literature or art," and adds rather shyly, "as of Greek or Roman genius." So Mr. Funk or Mr. Wagnalls thinks—I don't know which one of them is responsible for this particular item—and so, I fancy, most people think. Classic architecture means to those earnest souls who, though not architects themselves, know more about it than any architect could, and who write fulsomely about modernistic work and scathingly about classic—to these gentlemen classic means columns, domes, and acanthus leaves. Just why they should pick on acanthus leaves I can't imagine. Oak leaves are all right, and laurel is passable, and even poison ivy would do in a pinch, I suppose, but the acanthus is as anathema to them as the juniper berry to a prohibitionist.

Now I don't think that the classic in architecture is necessarily Greek or necessarily Roman, any more than it is Assyrian or Egyptian or Renaissance. As I see it the word in the definition to be accented is the word "standard." A classic column, for example, is a column which in proportion and beauty is the best that has ever been done in that particular kind of column or order. Now it happens that the most perfect columns that have ever been done are either Greek or Roman, as a general rule; there are some beautiful Egyptian columns and some fine Renaissance ones, and there are Gothic and Romanesque forms that are exceptional; but as a general rule a classic column is considered as being either Greek or Roman, and it is very easy to see why. Greek architecture was essentially columnar. Their most important buildings were temples, and the temples were as a rule composed of a simple cell surrounded generally on all sides by a screen of columns. As was the beauty of the column so was the beauty of the temple. And so they developed their column and the entablature over it, from the crude and clumsy early work to the culmination in the Parthenon. Some one has said, some time or other, that doubtless the good Lord, being omnipotent, could have made a better fruit than the strawberry, but equally doubtless he never did. Now it may be that some one may make a better Doric order than the Parthenon, but no one has done it yet and they've been trying for twenty-five centuries. And so, too, the other orders: Ionic and Corinthian have been standardized, not to the extent of the Greek Doric perhaps, but still there are certain general proportions that have stood the acid test of time.

I am emphasizing the column because the column in some form or other has always played an important part in architecture and always will. In origin it was structural, but as it became evident that it was in itself a beautiful



From "Fragments d'Architecture Antique"—D'Espouy

The Parthenon, from the restoration drawing by E. Loviot

architectural form, it was often used purely as such. It has been held that the column is debased when it loses its structural quality, but it seems to me there is little logic in that argument. In the Parthenon, for example, the columns support nothing but their own entablature. The real temple, the holy of holies, is the plain cella, and the early temples were this alone; the colonnade was an embellishment added entirely for its beauty. In Roman as well as Greek, in Renaissance and in modern work, the colonnade is used because it is the most noble and stately architectural form yet invented. As I say, even in modern work. The modernists will not use a classic column and they seem to prefer the pier, but they do use the colonnade, or rather what is in principle a colonnade. Now it seems to me that if, in these modern times of ours, I thought it would add to the beauty of a building or a memorial to use a colonnade of some sort, the logical thing to do would be to make the colonnade as beautiful as I could. I would not choose to employ the pier, which always seems clumsy and undeveloped, and I would not leave the caps off the columns or waste time trying to invent some entirely new form of column that no one had ever thought of before, because, frankly, it can't be done. A column in itself is a very simple form—a pier, a tree trunk, or any upright form of support. It looks better with some sort of cap to receive properly the beam above it. If the column is more slender than the Doric it needs a base to provide a proper footing; not necessarily structurally, perhaps, but to satisfy the eye. The cap, abacus, or plinth on top the column can be square as in the Doric, or ornamental as in the Ionic or Corinthian; the base, if used, can be variously moulded. But that's all there is to it. The changes that can be rung on this simple form are limited, and, believe me, they have all been tried. Even the ugliest forms have been done and done. So—what's the use? If you are going to use columns at all, or a colonnade, why not use a good one. A wheel, for example, is an essential feature of any vehicle. Some time in the dawn of history mankind discovered that a round wheel was the most satisfactory. Even Henry could not improve on that shape—so why waste time trying to make a square one or an elliptical one? Now I don't mean at all to imply that you must always use the Parthenon order or the Erechtheion order, or any order exactly, but you can use the principle of it and be governed by the experience of the past as to proportion and detail.

And the same with the ornament. I myself see nothing particularly banal in the acanthus leaf. It does not grow in America, so far as I know; perhaps it does not grow anywhere now; but it is a beautiful form, it can be variously treated, is decorative, and carves well and can be combined with other forms. So why not use it? It is not necessary to follow slavishly the honeysuckle or the egg-and-dart or waterleaf or modillions or rosettes or frets or dentils; they are all merely pleasing architectural forms that can be combined in thousands of different ways. All these classic things—columns, ornament, entablatures—are the A B C of architecture; they are beautiful and have stood the test of time and it is as foolish to throw them overboard and seek for some abstruse negroid or other primitive ornament which is not beautiful, as it would be to advocate the abandonment of the Roman alphabet and the substitution of the Sumerian or the Egyptian hieroglyphs.

So far I have been dealing with details, and my answer to the question in the first paragraph would be *yes;* but that yes would be qualified. I do not advocate, and I have never advocated, the deliberate and slavish copying of classic work or detail, or of the work or detail of any style. Architecture is the art of building beautifully and appropriately. An exact copy of the Parthenon would be most inappropriate for a savings bank in Council Bluffs, and the Erechtheion order used as the casing for the steel columns which support a fifteen-story building is ridiculous; the cornice of the Strozzi palace on the top of an office building is unthinkable; nor would I care to reproduce an old temple as a memorial nor exactly multiply the modules of a classic column by ten for the same purpose. But I do feel that if any building, or memorial, calls for an order I would prefer to base that order, and its detail, on a beautiful form, even if it was old, rather than on a new and original form that was ugly. If I didn't I might find myself in the position of the designer of a gilded

F. R. Yerbury

The New Concert Hall, Stockholm, Sweden. Ivar J. Tengbom, Architect or near-gilded, hostelry, by a prominent local man. The foreign gentleman could not take his eyes off a doorway that was particularly atrocious. Between sips—this was in Canada—he kept murmuring: "Why, why did he make it so oogly?" And after the fifth libation he suddenly grabbed his entertainer's knee with a force that almost broke his leg and said: "Now, now I know why he made it so oogly! It was because he did not know how to make it any ooglier."

Now as to the latter part of the answer, the most important part perhaps: the successful use of classic depends upon the type of modern building that is to be built. Most writers on modernistic architecture seem to think that the high skeleton-framed commercial building represents modern architecture, and I suppose in a limited sense they are correct. Probably more money is spent annually in the erection of these monstrosities than for any other type, and certainly in the last ten or fifteen years there has been a great improvement in their design, but this improvement is not due to modernistic treatment. Rather it is due to the zoning restrictions and to the fact that more competent architects are being employed on this type than was customary years ago. More study is given to the design, more care taken in the silhouette and, more than all, the client is more anxious as a rule to get a decent-looking building than he was formerly—he finds it pays as an advertisement. In other words, the success of the high building depends on the *parti*, the silhouette, and not on the ornament. A well-proportioned building with a good outline will be successful whether or not the detail is classic or modernistic or Chinese.

Now most of the modernistic ornament that I have seen is not good; it is not beautiful. It certainly is bizarre but not original in itself. I can see no more originality in putting negroid or Aztec ornament on a tall building than Romanesque or Renaissance or classic. All nations, all races, have been using ornament of some kind or other since the cave dwellers of southern France, and it is fairly safe to assume that every conceivable form and combination of line has been tried. Who, therefore, shall say what is modern and what is original?

So I feel that if any one uses classic ornament, not misplaced, on a high building, the building is generally the better for it, but I do not think that the building should be crowned as it used to be with a classic cornice nor the façade composed of overgrown pilasters or columns extending up half a dozen stories; nor should there be a neat temple on the top of it; and, as a rule, a gigantic portico is an unnecessary and illogical feature.

But there are, fortunately, other kinds of structures that are being built in modern times; public buildings, churches, libraries, memorials. As to churches, I am in doubt. A small church can be, and often is, made extremely fine in Georgian or Colonial, our own heritage of the Renaissance, and there are historical examples of cathedrals in that style that are quite well known; Gothic is wonderful in the old work or when done by a modern master, as Liverpool can testify; there are fine Byzantine examples. They are all good types which could be developed logically, and any one of them would be preferable to the horrible reinforced concrete atrocities that are now being done on the Continent.

For public buildings or memorials there is no question. I simply cannot conceive of these types being done modernistically. The French have been trying it lately with the most awful results. Now it isn't that I insist on these types being Greek or Roman or Renaissance, or that they should be copies of any old building or temple or monument. I would be the first to applaud any new virile design that was fitting or beautiful, but I cannot stomach at any price a colonnade, or what purports to be one, composed of columns without caps, or of great wide fluted piers which have no more design than an ordinary washboard, nor big blocky entablatures without grace, beauty or appropriateness. Personally I am fond of simplicity and I do my feeble best to attain it, but simplicity without form is merely stupidity. You can cover a plain square box of a building with the most beautiful ornament or you can leave all the ornament off it, but the result is just a square box. I hate a copy and I am keen for originality, but I can't help feeling that in their zeal for it some of the modernists have gone beyond their wildest hopes, and have not only succeeded in doing something that no one has ever done before, but also something that no one will ever do again.

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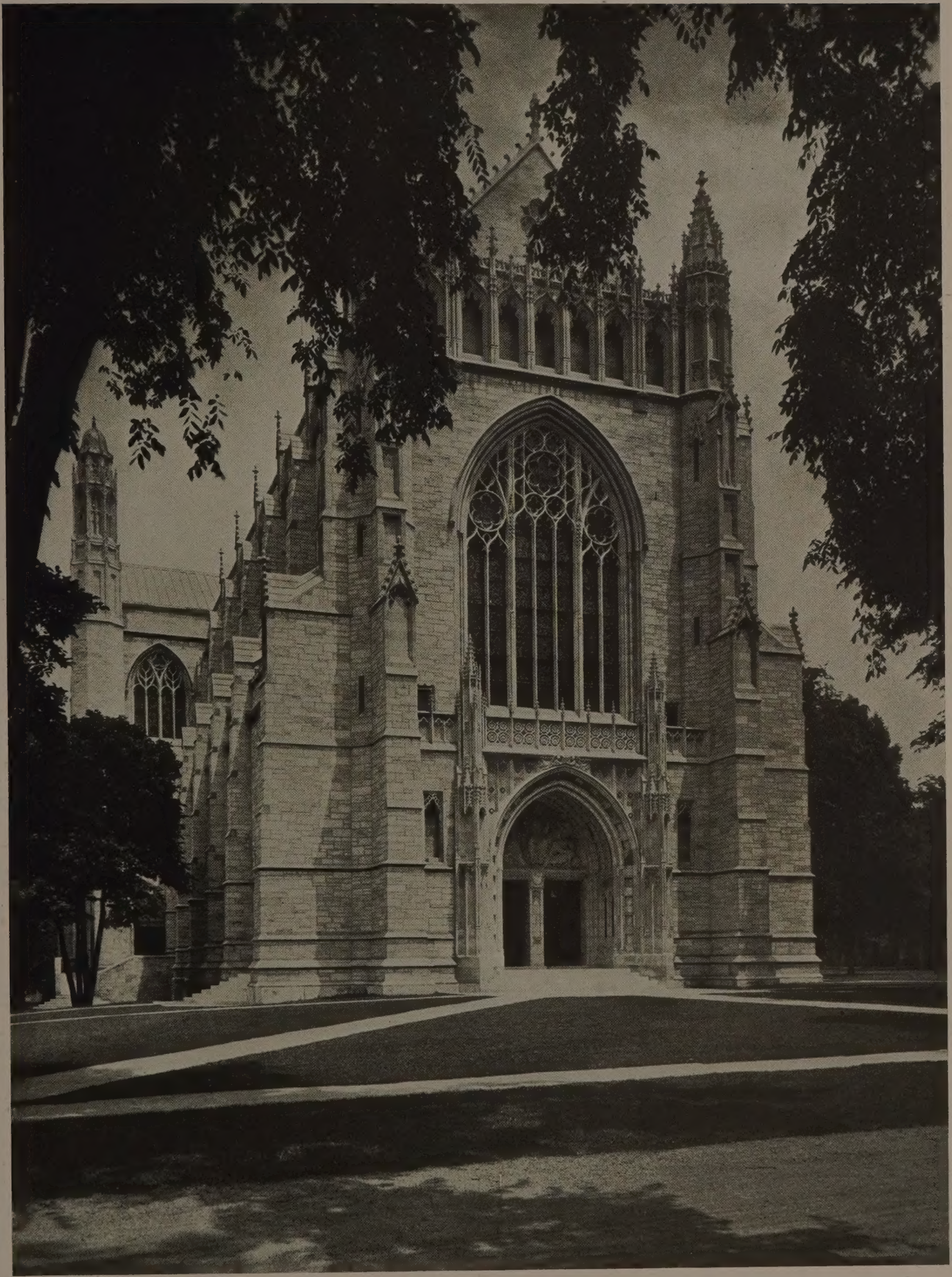
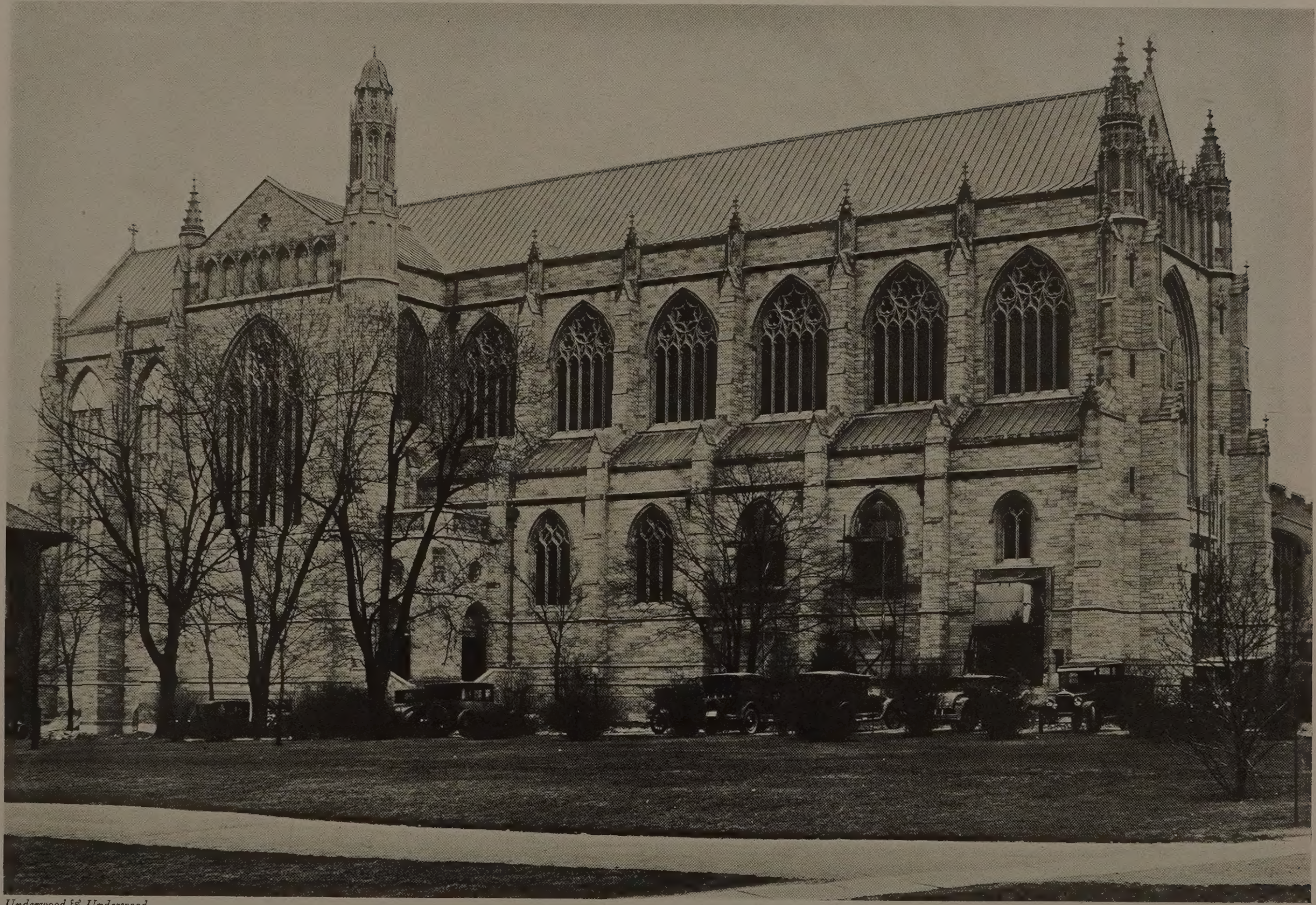


Sigurd Fischer

THE PRINCETON CHAPEL, PRINCETON, N. J. West Front

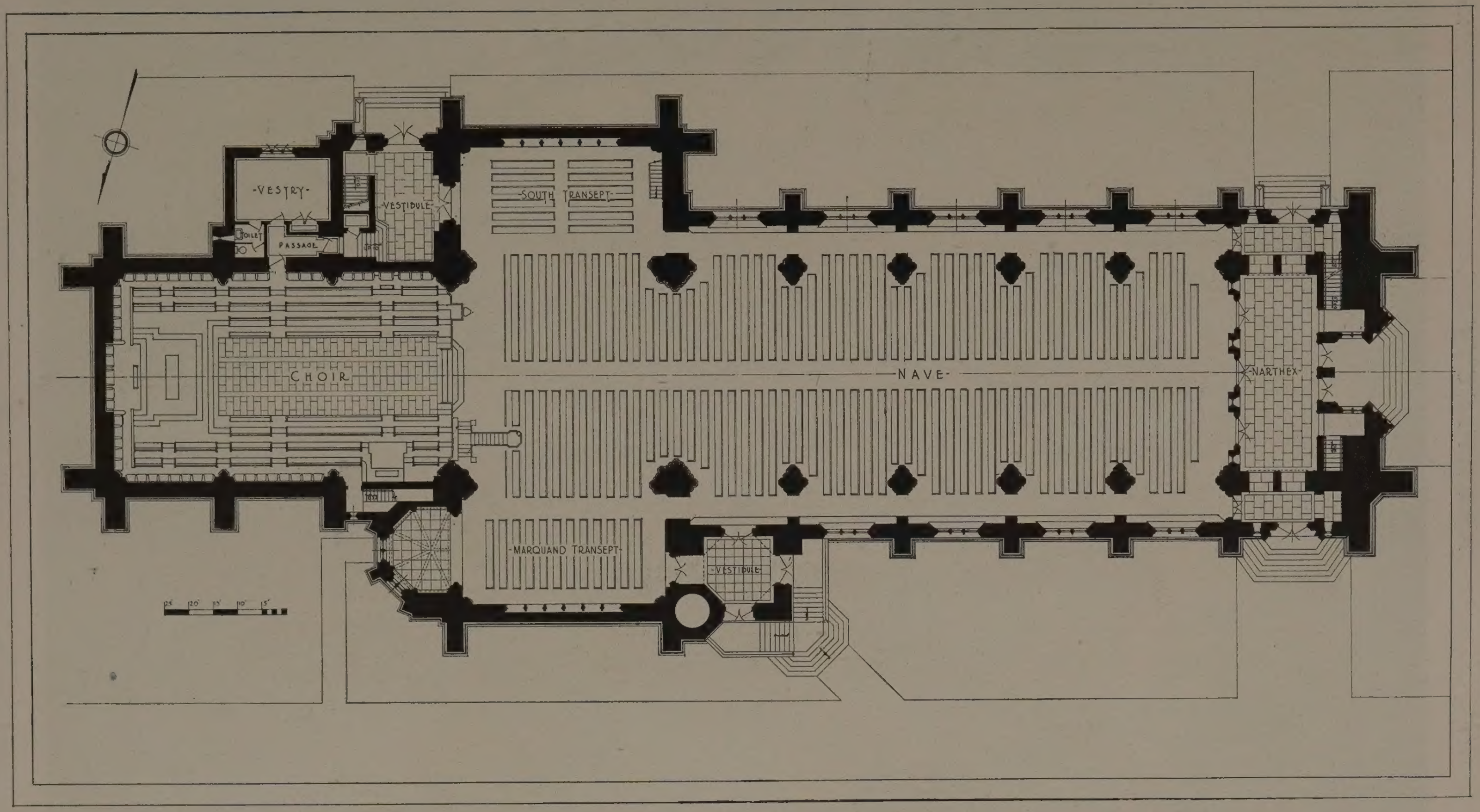
CRAM & FERGUSON, ARCHITECTS



Underwood & Underwood

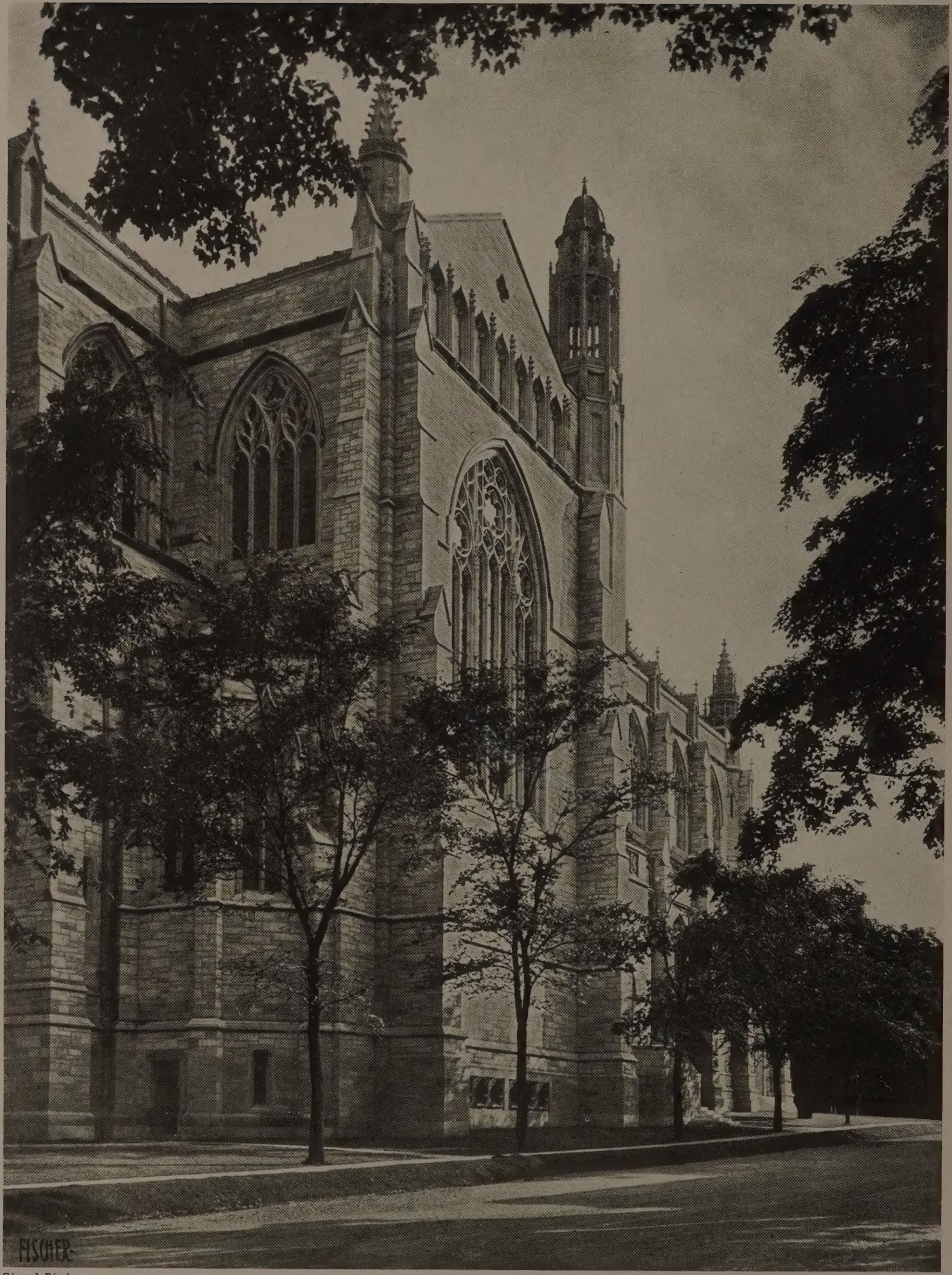
THE PRINCETON CHAPEL, PRINCETON, N. J. North Side.

CRAM & FERGUSON, ARCHITECTS



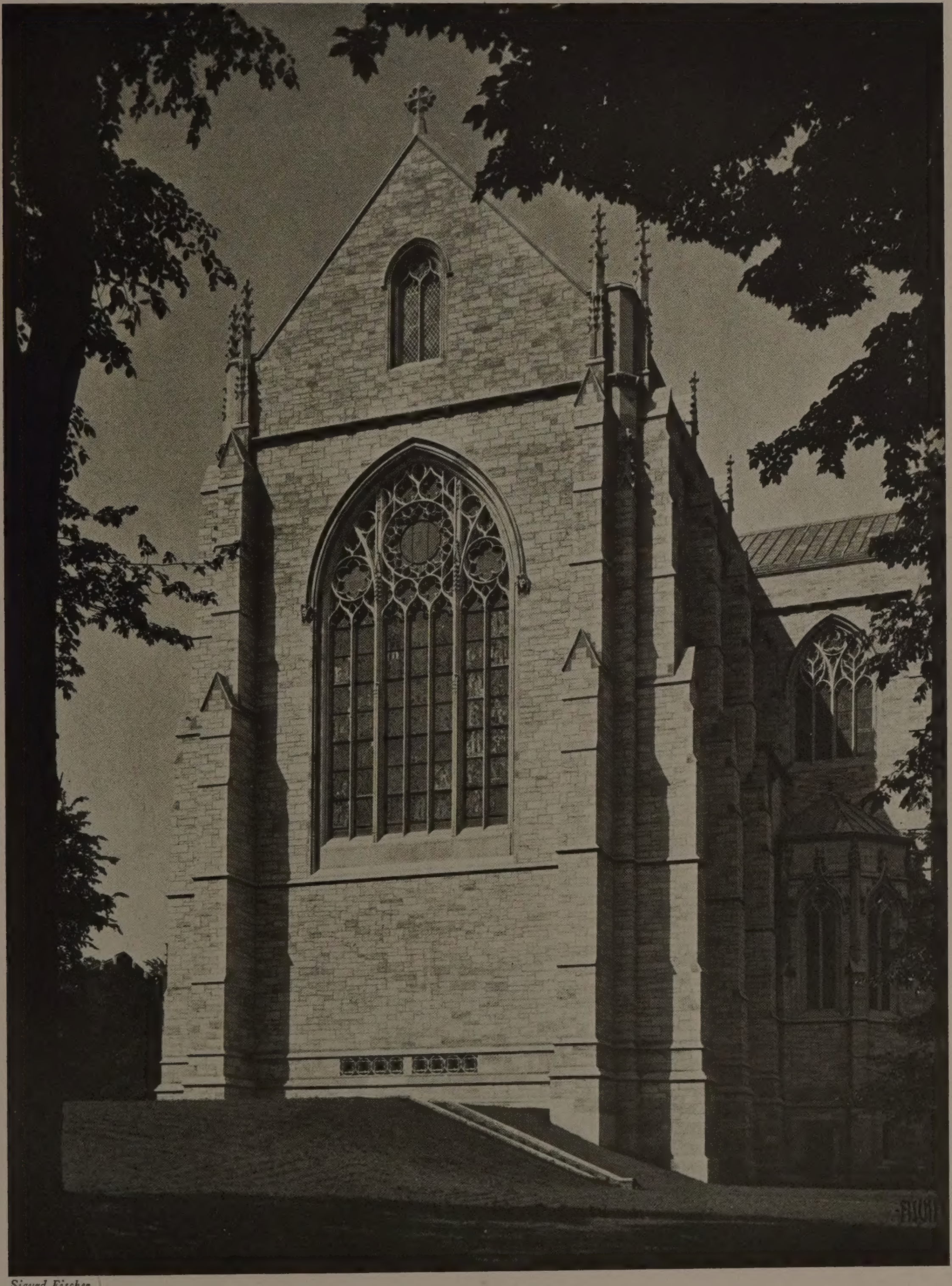
The Princeton Chapel, Princeton, N. J. Main Floor Plan

CRAM & FERGUSON, ARCHITECTS



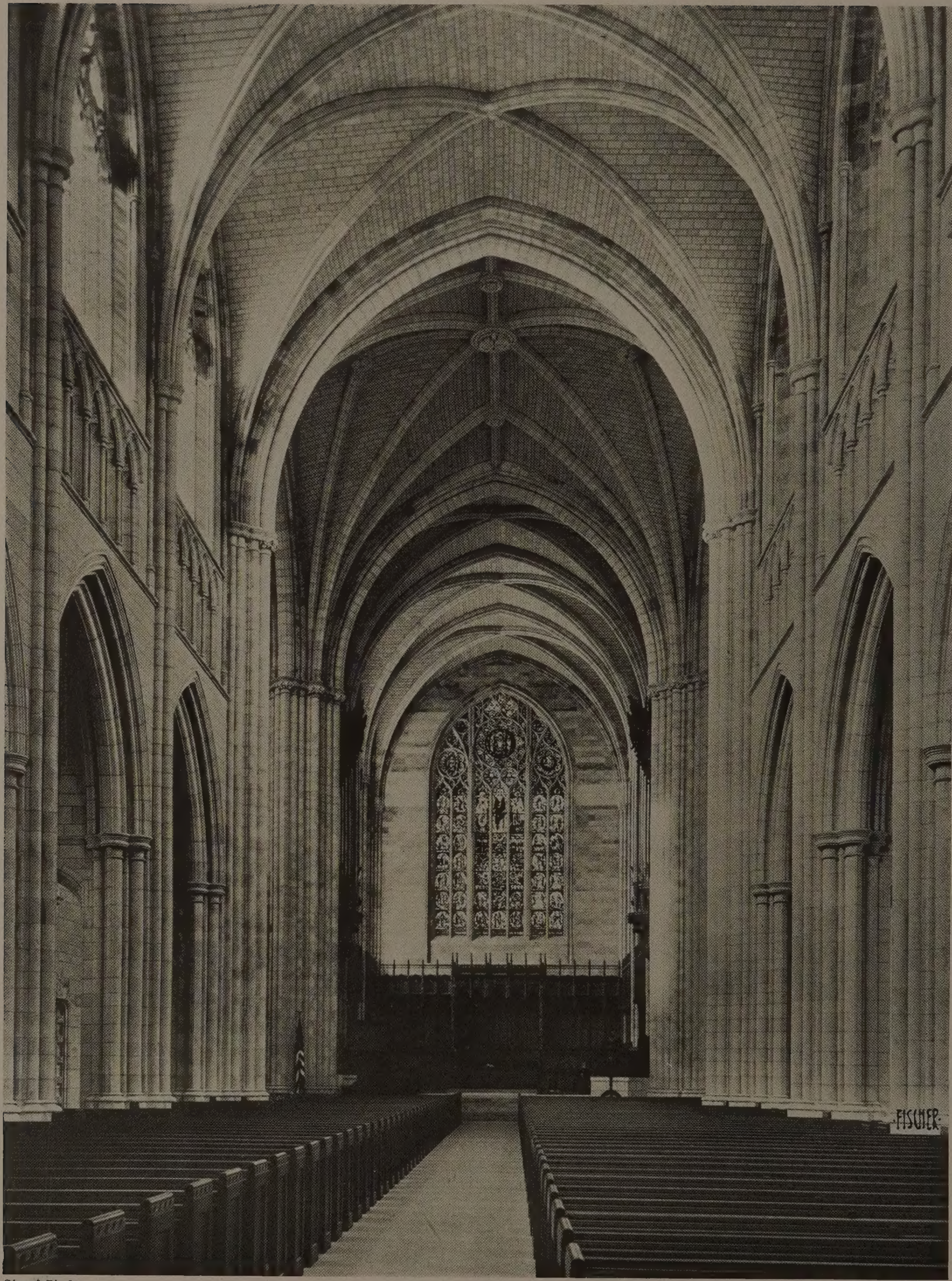
Sigurd Fischer

The Princeton Chapel, Princeton, N. J. North Transept CRAM & FERGUSON, ARCHITECTS



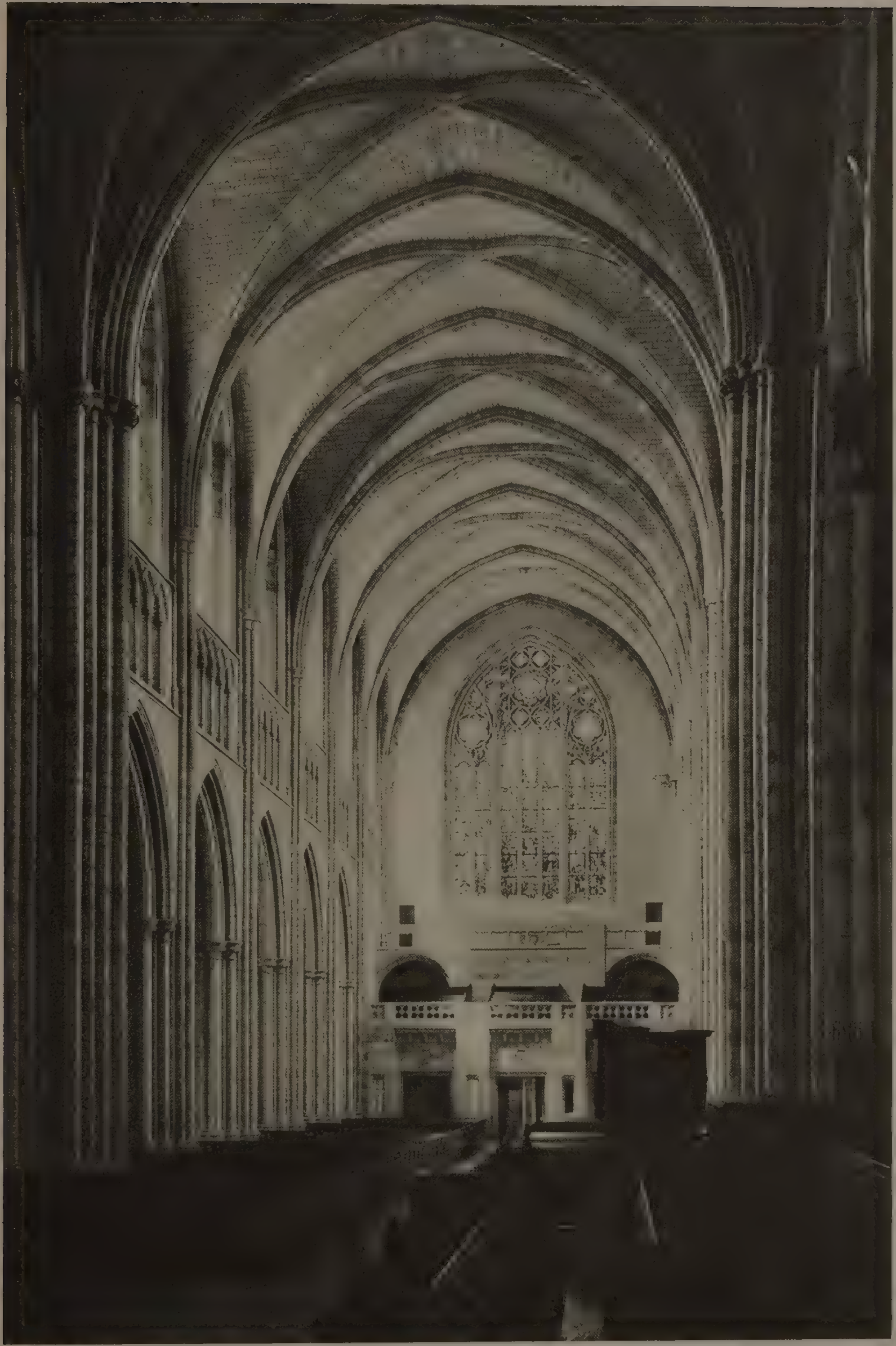
Sigurd Fischer

THE PRINCETON CHAPEL, PRINCETON, N. J. East End CRAM & FERGUSON, ARCHITECTS



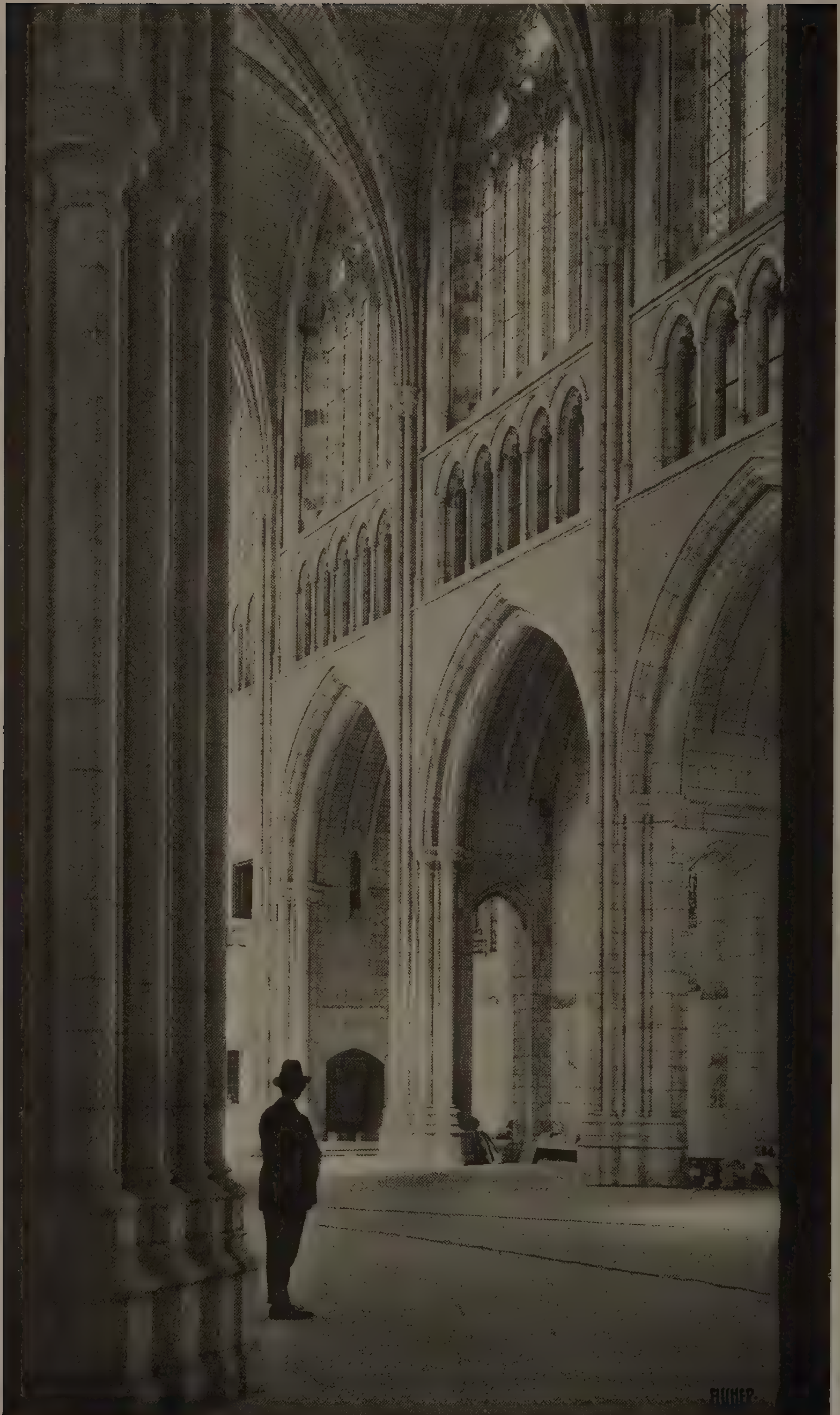
Sigurd Fischer

THE PRINCETON CHAPEL, PRINCETON, N. J. Nave and Choir CRAM & FERGUSON, ARCHITECTS



Sigurd Fischer

The Princeton Chapel, Princeton, N. J. Rear of Nave. CRAM & FERGUSON, ARCHITECTS

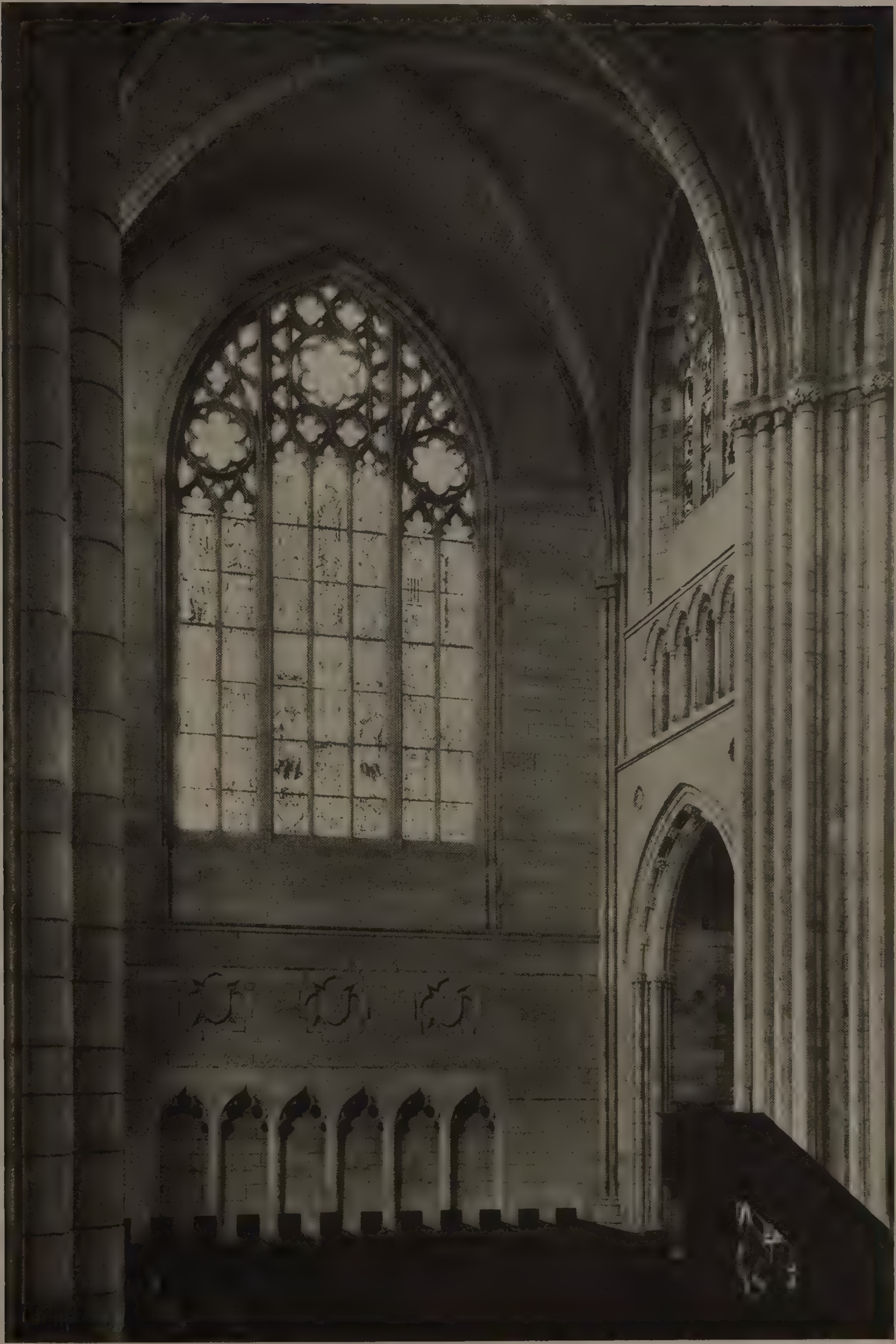


Sigurd Fischer

The Princeton Chapel,
Princeton, N. J.

Nave and Aisle

CRAM & FERGUSON,
ARCHITECTS



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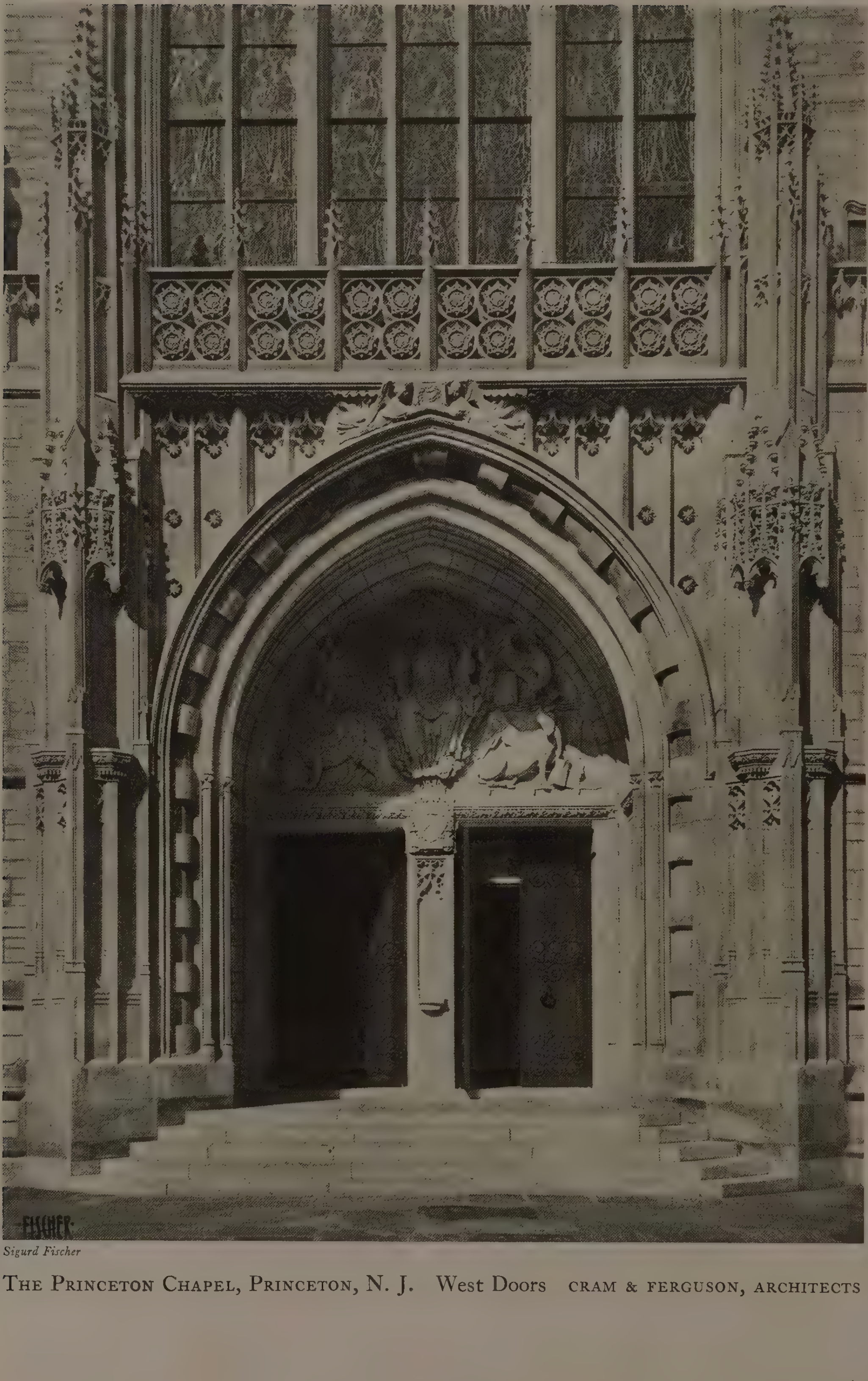
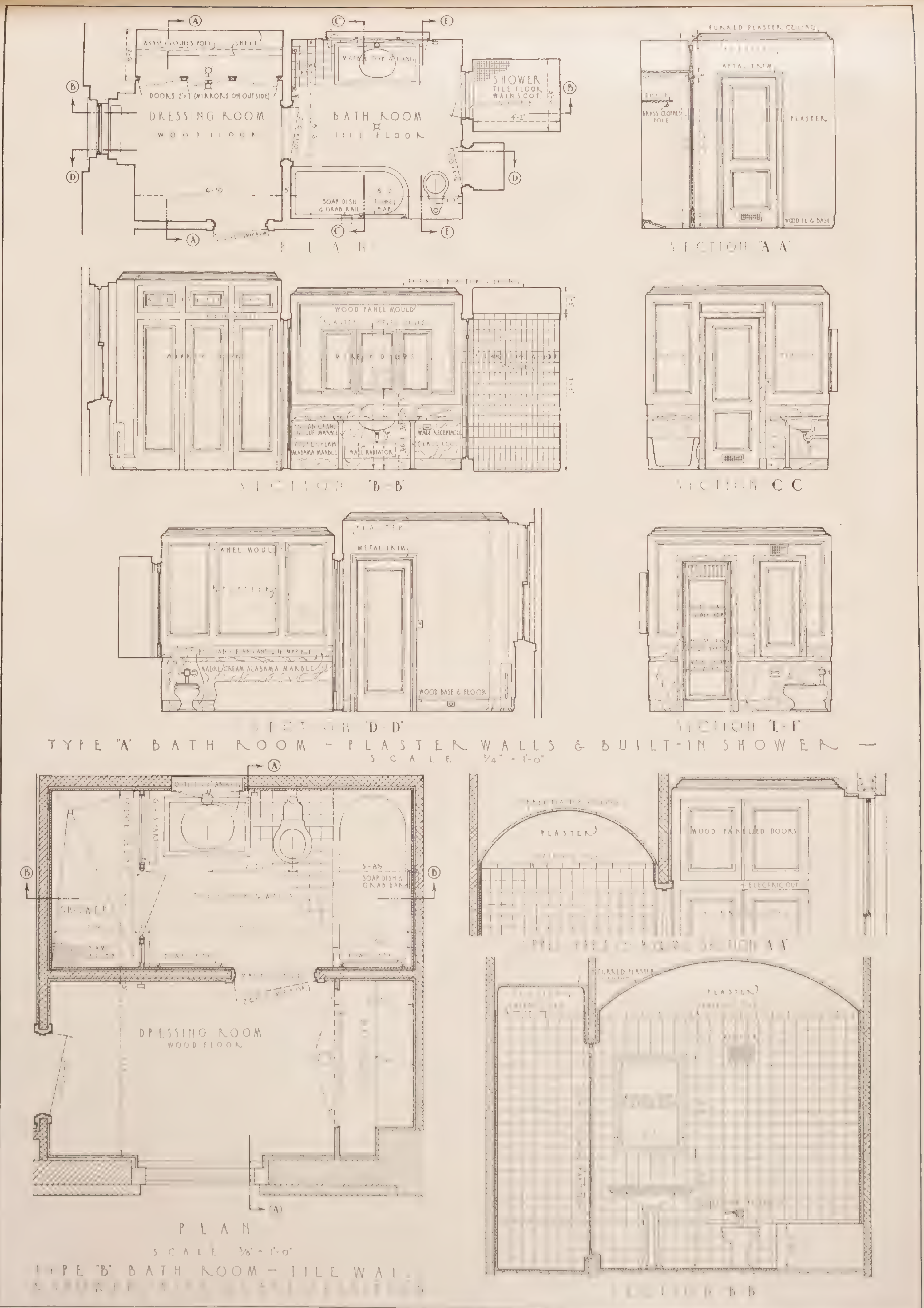
THE PRINCETON CHAPEL, PRINCETON, N. J. North Transept CRAM & FERGUSON, ARCHITECTS



Sigurd Fischer

The Princeton Chapel, Princeton, N. J. West Doors CRAM & FERGUSON, ARCHITECTS



Details of Bathrooms, Sherry-Netherland Apartment Hotel, New York City
SCHULTZE & WEAVER, ARCHITECTS; BUCHMAN & KAHN, ASSOCIATE ARCHITECTS

NOTES

Details of Bathrooms, Sherry-Netherland Apartment Hotel, New York City

SCHULTZE & WEAVER, ARCHITECTS; BUCHMAN & KAHN, ASSOCIATE ARCHITECTS

The two types of bathrooms illustrated are examples of excellent taste in the usage of materials and offer suggestions not only for the first-class hotel or apartment, but for private residences where the architect is not limited to the usual low wainscot and monotonous white tile floor of small hexagonal units.

Bathroom, Type A: Furred plaster ceiling; plaster cornice; marble wainscot to height of 3′—base and trim of Belgian grand antique; remainder of madre cream Alabama marble; wall above of plaster with wood panel-moulds.

Lavatory top of 2½″-thick Belgian grand antique marble, 4′ long, supported on glass legs.

Shower of tile, floor and walls; plaster ceiling; plate-glass door.

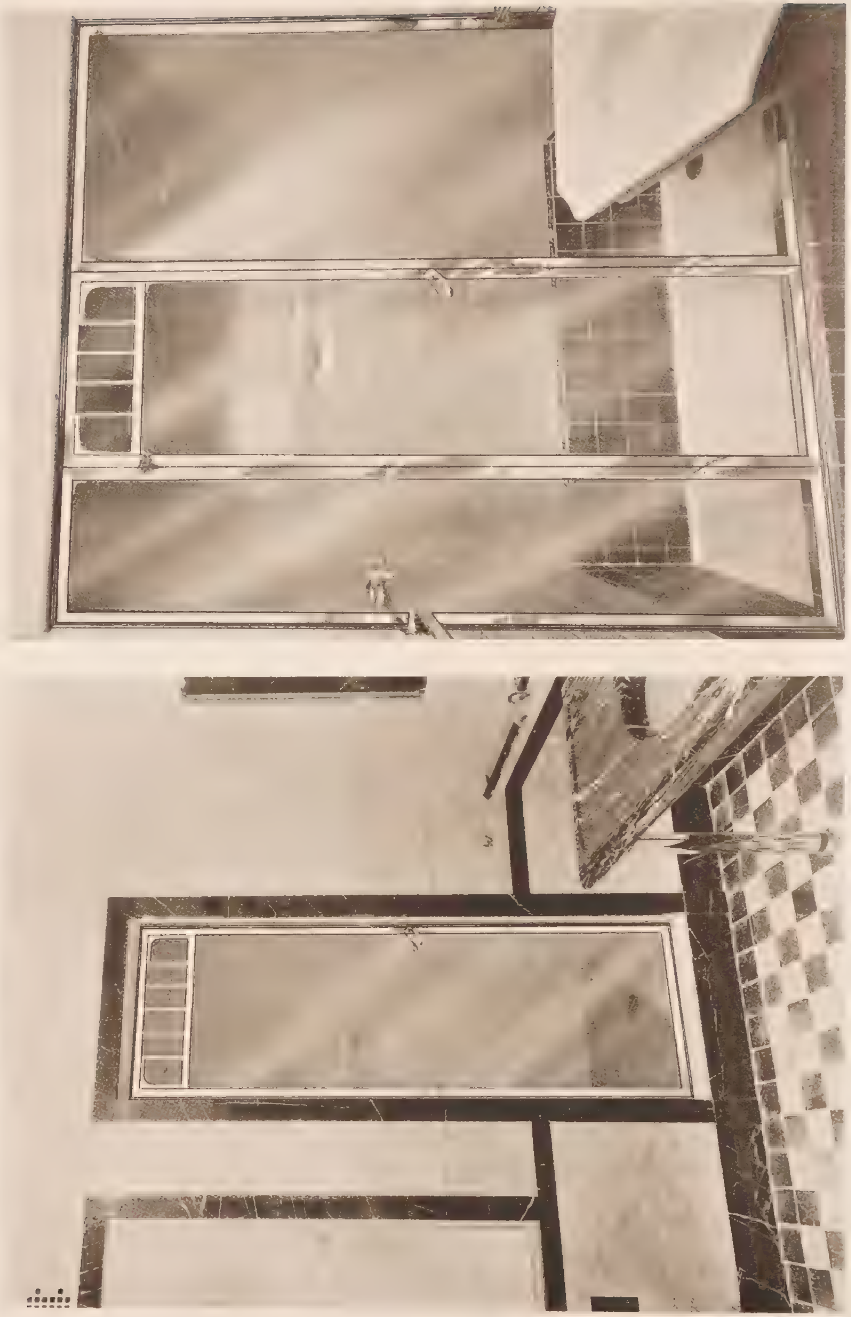
Mirror doors to medicine-cabinet above lavatory.

Bathroom, Type B: Furred plaster ceiling in form of groined vault; walls of faience tile from floor to spring of vault, plaster above this line; floor of tile.

Lavatory top, 2′ 8″ wide.

Shower walls on three sides, of faience tile (same as bathroom), fourth side a glass partition; plate-glass door; ceramic tile floor.

Dressing-rooms: Wood floor and base; mirrors on outside of wardrobe closet doors; wardrobe closets provided with shelf, brass clothes-pole, shoe-rack, and cupboards above 7′ doors.



Details of Bathrooms, Sherry-Netherland Apartment Hotel, New York City

Schultze & Weaver, Architects; Buchman & Kahn, Associate Architects

(See measured details on other side of sheet)

EDITORIAL COMMENT

❖ Vol. LVIII, No. 5 ARCHITECTURE November, 1928 ❖

Any form of deception is a departure from the principle of truth in architecture. The imitation of old work, for instance, with its crudities and irregularities, is false in art. It makes pretense of an antiquity which does not really belong to it.

JOHN BELCHER, A. R. A.

OUT OF THE FRYING-PAN

IT has been but a few years since architectural criticism, as directed against domestic work, found fault with our failure to appreciate the beauty and charm of old work. Our buildings either owed no allegiance whatever to an accepted architectural type, or else were brutally manhandled in attempting to conform to one. To-day the criticism may, with equal justice, be levelled at the designer of small houses in that he knows too much about historic styles rather than too little. The pendulum has swung to the other end of the arc. In fairness to the profession it must be admitted that the extremes in stylistic "prettiness" are chargeable to the speculative builder and real-estate promoter rather than to the architect. The former, with the aid of half-baked draftsmen of a superficial cleverness, utilize all the small tricks of stylistic idiosyncrasies in the fond hope that they are creating English half-timber cottages, Italian villas, and Spanish haciendas that outdo in picturesque detail and color their honorable prototypes. Extreme development of stucco textures, exaggerated adze-hacking of built-up wood beams, roof ridges tortured into heavy sags, shamelessly crude brickwork—these absurd excesses are carried out in the name of "the picturesque" or of "primitive craftsmanship" until the stomach fairly revolts at the results. Confronted with these reeking affectations, one turns for relief even to the jig-sawn atrocities of 1870, wondering unhappily just where art education is leading us.

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Every great achievement in building, pushed to its extreme by the élan of its creators, has in it something of the monstrous, from which those who have not gone along step by step will recoil.

FISKE KIMBALL

Harmonious unity is achieved, as in a strain of music, by repetition, balance, and climax in a composition.

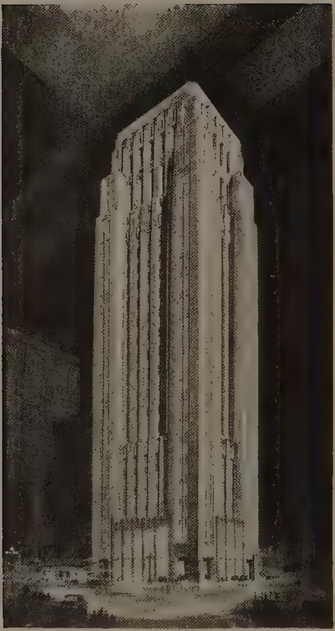
A. S. G. BUTLER, F. R. I. B. A.

❖❖❖

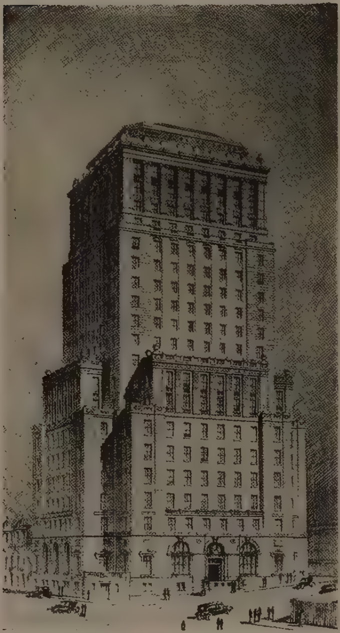
UNFINISHED

WE pride ourselves rather heartily upon the American office building of to-day—and not without some cause. And yet it is an unfinished job—a pair of boots polished in front but muddy and unkempt behind. We spend some thought in design upon the exterior, refining its general mass within the limits of our many restrictions, developing some interesting detail about the main entrance, playing with the possibilities of unusual materials and textures. We spend some thought and some of the money at our command upon the lobby, the elevator corridor, the mail-box—particularly the mail-box. But as for the main portion of the structure—the office space for which the building is being erected, the offices for which the tenants are going to pay rent and in which they must spend their hours of daylight—these are merely the results of a few lines on the typical floor plan, achieved with a few short paragraphs of the specifications. Either the interior is divided horizontally into mere lofts, or, if subdivided into corridors and offices, the latter are crude cubicles of white plaster and stock-pattern partitions, knobby with the projections of structural verticals, without form and void. The windows are spaced wholly by utilitarian requirements modified by the necessity of the exterior design. Such things as the proportions between height, length, and width and a decent fenestration are not even attempted.

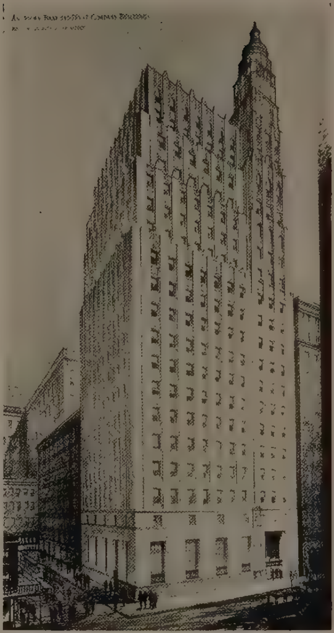
Oh, yes, the necessity for obtaining the maximum of rentable area and the demand on the owner's part for an impressive exterior first and last are difficulties, but where is the architectural problem without its difficulties? The fact that the owner and the long-suffering public are blind to the stark crudity of the result is little excuse for the architect. He at least should know better and should contrive to achieve something better. That, unquestionably, is his job.



Another proposed Minneapolis skyscraper—The Rand Tower, at Marquette and Sixth Streets. Holabird & Root, Architects

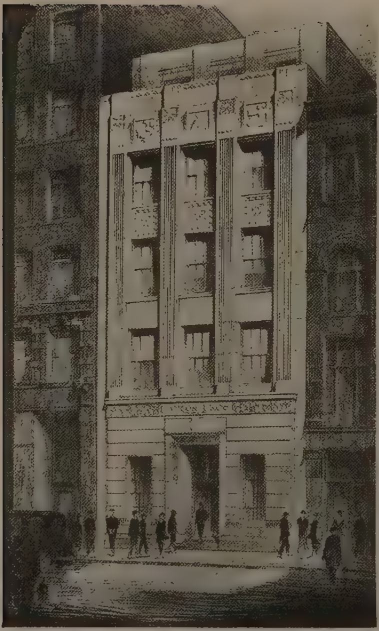


The head office of the Bell Telephone Co. in Montreal is nearing completion. Barott & Blackader, Architects



Moise H. Goldstein, Architect, has designed this tall building for the American Bank & Trust Co., New Orleans

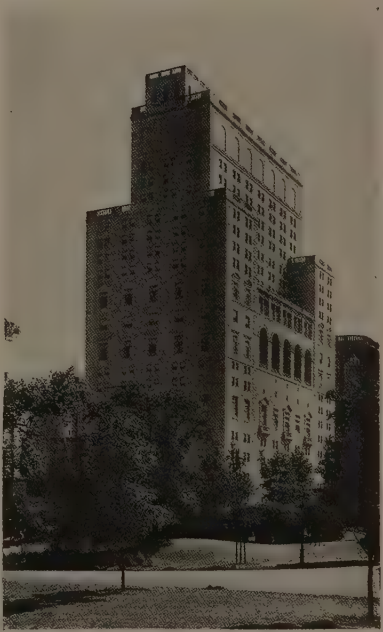
Architectural News in Photographs

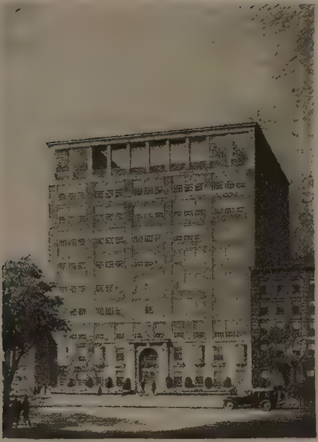


Preliminary perspective of an office building for Hanson Brothers in Montreal. H. L. Fetherstonhaugh, A. R. I. B. A., Architect

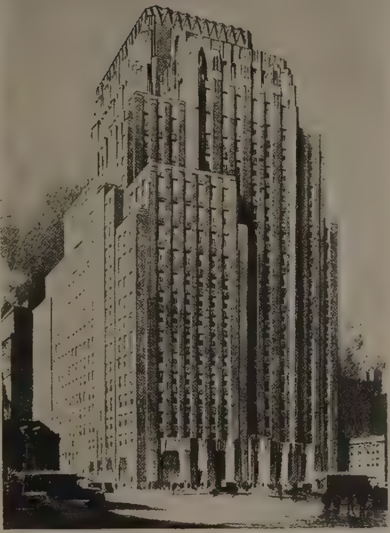
By Ewing Galloway, N. Y.

The recently completed home of the New York Athletic Club, Seventh Avenue and Central Park South. York & Sawyer, Architects

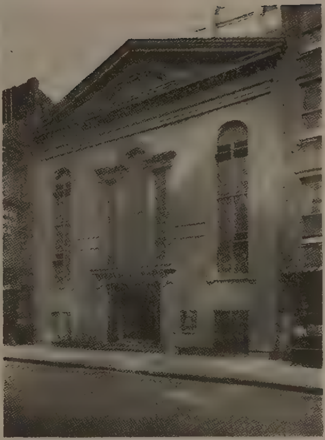




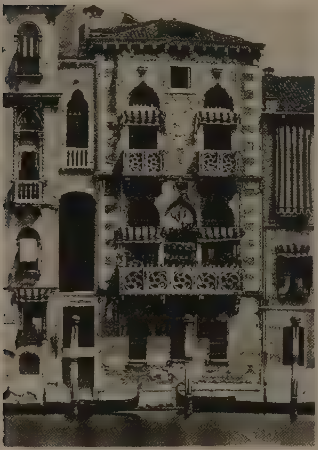
The proposed Dalton School on East 89th Street, New York City. Richard H. Dana, Jr., Architect

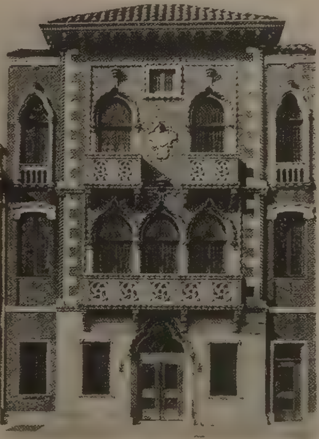


Voorhees, Gmelin & Walker, Architects, have designed this building for the Western Union Telegraph Co. in downtown New York



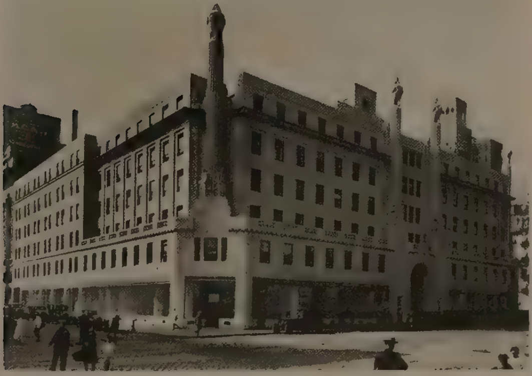
St. John's Church, New York, on site of the first Methodist church in this country, is to be enclosed in an office building



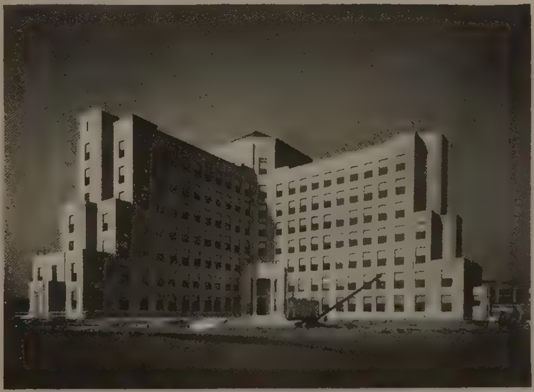


The Palazzo Contarini-Fasan (at left) on the Grand Canal, Venice, which has loaned its façade motives to a real-estate office building in Newark (at right) for the E. J. Maier Corporation. Frank Tripputti, Architect

By Ewing Galloway, N. Y.



The building just completed for the International Magazine, New York, from the designs of Joseph Urban



New office building for the Baldwin Locomotive Works at Eddystone, Pennsylvania. Simon & Simon, Architects

BOOK REVIEWS

EARLY AMERICAN WALL PAINTINGS, 1710–1850. By EDWARD B. ALLEN. 110 pages, 8½ by 11 inches. Illustrated from photographs. New Haven: 1926: Yale University Press. $7.50.

Mr. Geerlings's article on pages 275–282 will give an excellent idea of the subject-matter of this book. Mr. Allen opens up a vista into the early days of American wall decoration that, for some mysterious reason, has hitherto remained little known. The volume is beautifully made—a publication made possible by the Philip Hamilton McMillan Memorial Publication Fund.

THE A B C OF PLASTERING. By A. H. TELLING. With an Introduction by T. P. BENNETT, F. R. I. B. A. 235 pages, 5 by 7½ inches. Illustrated with diagrams. Printed in Great Britain. London: 1928: Oxford University Press (American Branch, New York). $2.85.

A text and reference book for the apprentice and student, by the General Secretary of the National Association of Plasterers, Granolithic, and Cement Workers, England. Arranged alphabetically by terms used in the craft.

SCIENTIFIC PAPERS OF THE BUREAU OF STANDARDS: No. 552, Transmission of Sound Through Building Materials. By V. L. CHRISLER. 5 cents.

The above is sold only by the Superintendent of Documents, Government Printing Office, Washington, D. C.

KITCHEN MANAGEMENT: Construction, Planning, Administration. By F. O. DAHL. 364 pages, 6 by 9 inches. Illustrated. New York: 1928: Harper & Brothers. $5.

Out of an impressive mass of data covering the whole problem of the commercial kitchen, there is much practical information for the architect, though he will need to do considerable sifting.

DRAWING WITH PEN AND INK, and a Word Concerning the Brush. By ARTHUR L. GUPTIL. Introduction by FRANKLIN BOOTH. 434 pages, 8¾ by 11¾ inches. Over 800 illustrations; 5 in color. New York: 1928: The Pencil Points Press, Inc. $8.50.

The most comprehensive manual of instruction yet attempted upon this subject. The author knows, through his experience in lectures and instruction given at Pratt Institute, Brooklyn, just how to carry the student through his novice stage and into the more complex phases of the subject. An excellent selection from the work of experts is supplemented by exceptionally lucid drawings by the author to make clear each detail of his instruction. Mr. Guptil is careful, however, in his efforts to teach the technic of line drawing, not to bind the reader to formulas but rather to enable him to develop all the individuality of expression of which he may be capable.

A PARALLEL OF THE ORDERS OF ARCHITECTURE: Greek and Roman. By CHARLES NORMAND. 64 plates, 9¾ by 11½ inches. Limited in England. London: 1928: John Tiranti & Co. Cloth bound, 6s; portfolio, 5s.

The plates are beautifully drawn and their exquisitely fine lines reproduced with rare fidelity in a special process. It has been the publishers' aim to produce a worthy parallel of the orders at a minimum cost, and they have surely succeeded.

EVERGREENS FOR THE SMALL PLACE. By F. F. ROCKWELL. 84 pages, 5 by 7¼ inches. Illustrated by line drawings and 6 photographs. New York: 1928: The Macmillan Company. $1.

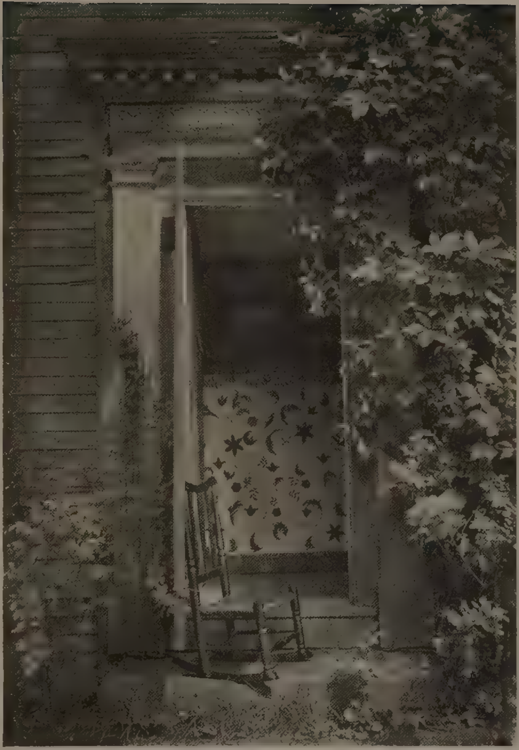
A compact handbook, crowded with practical information, to be used in conjunction with reliable nursery catalogues. There is a convenient "list of evergreens for special purposes."

MISSOURI'S CONTRIBUTION TO AMERICAN ARCHITECTURE. A History of the Architectural Achievements in This State from the Time of the Earliest Settlements Down to the Present Year. Compiled and Edited by JOHN ALBURY BRYAN, President St. Louis Architectural Club. 286 pages, 10 by 12¾ inches. Profusely illustrated from photographs. St. Louis: 1928: St. Louis Architectural Club.

A notable contribution to contemporary architectural records, compiled for the occasion of the A. I. A. Convention of 1928, at which time a copy was presented to each of the visiting delegates and guests.

ALPHABETICAL INDEX AND NUMERICAL LIST OF U. S. GOVERNMENT MASTER SPECIFICATIONS. Circular of the Bureau of Standards No. 319. Complete to Jan. 1, 1928; issued March 14, 1928. 18 pages, 7 by 10 inches. Washington, D. C.: 1928: U. S. Government Printing Office.

ENDURANCE AND BEAUTY IN STEEL BRIDGES. By CHARLES EVAN FOWLER, Consulting Engineer. 19 pages, 8½ by 11 inches. Illustrated from photographs and drawings. New York: 1928: American Institute of Steel Construction, Inc.



Frary house, Deerfield, Mass. Long, slender, spiral stems with forget-me-nots and tulips disport on a pinkish buff background

Painted Wall Patterns from Colonial Days

By Gerald K. Geerlings

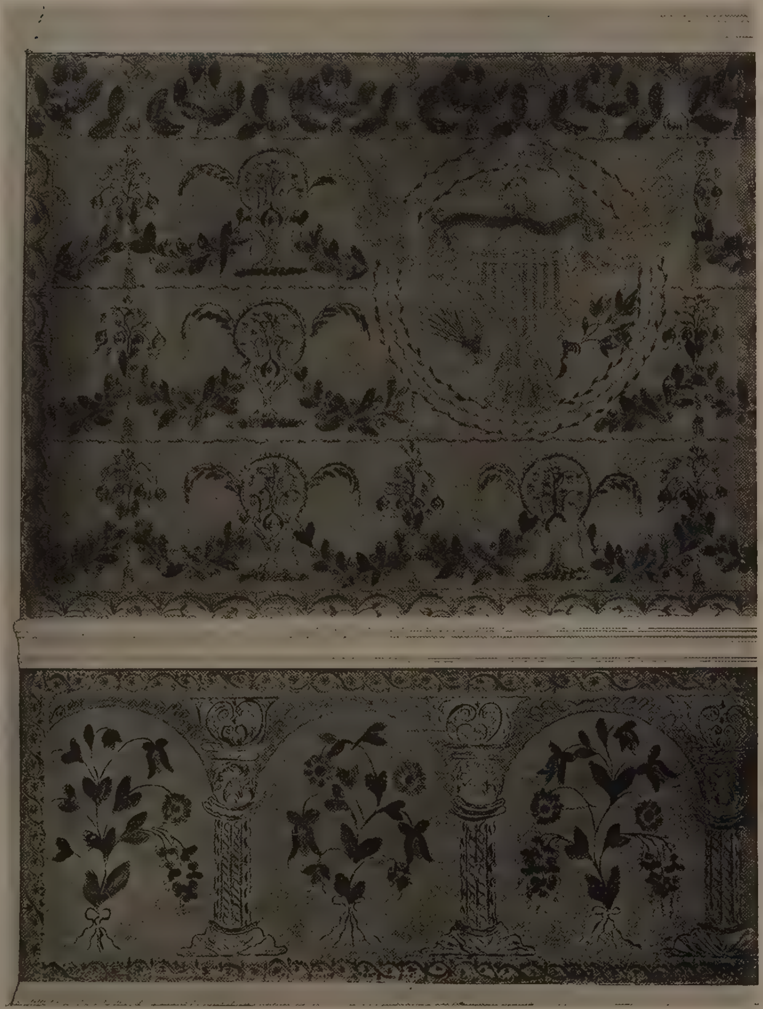
(Editor's Note: *We are indebted to Mr. Edward B. Allen for the privilege of reproducing illustrations from his book "Early American Wall Paintings" (New Haven: Yale University Press, 1926) which is reviewed on the page opposite, and to the various owners of the houses for granting permission to reproduce photographs of the interiors illustrated.*)

THE wall patterns of early New England are unique, as they are enviable. They alone among Colonial decorative units have not been imitated and commercialized. It is said that more certified furniture "antiques" are in existence now than at the time of the War of 1812, and that the next decade will double the present number. No hamlet, regardless of climate or geography, is without "Colonial" aspirants among its dwellings. Yet the old aristocrats of the stencilled and frescoed rooms of New England, and an occasional one on Long Island, have no "poor relations" of this generation of which they need be ashamed.

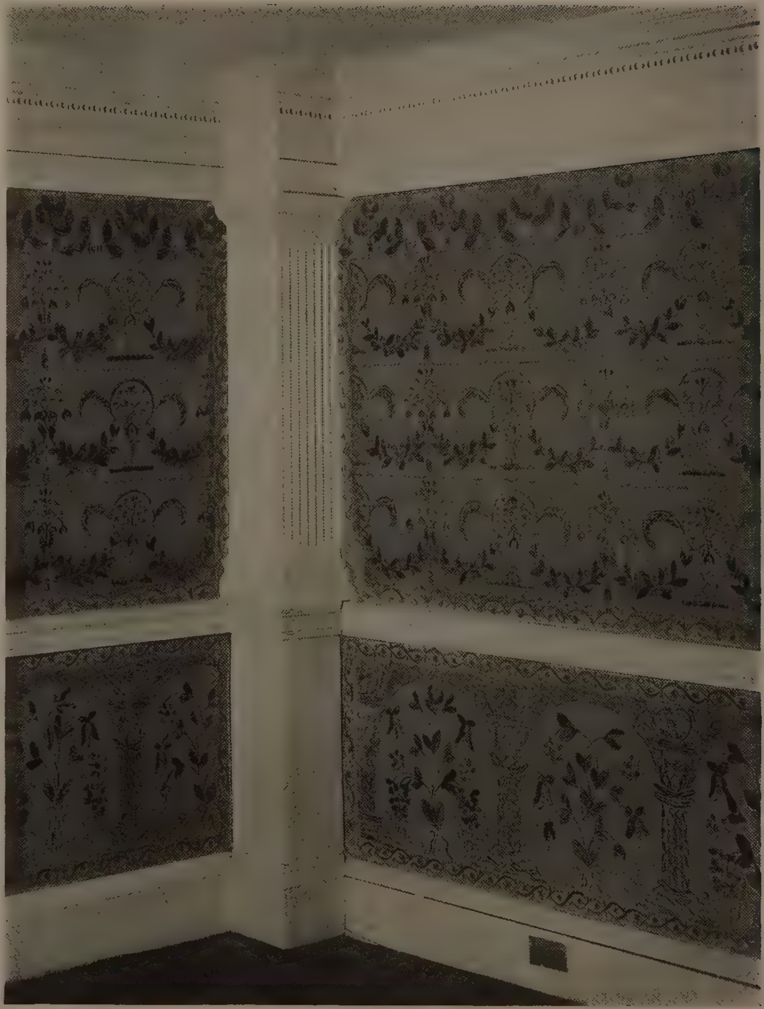
By the same fortunate circumstances which have papered and painted over the old patterns and preserved them, until some respectful enthusiast like Edward B. Allen discovered their existence, their cheap imitation has been spared present-day propagation. As far as we can ascertain, the only modern architect to use the pleasant old mannerism of thus decorating walls is Richard H. Dana, Jr., in collaboration with the Misses Marion Bridgman and Alice Erskine. The former has used it in his own morning room at "Highfield," Washington, Connecticut (page 281), and on several more recent houses; the execution by Miss Bridgman and Miss Erskine has been that of the careful archæologist combined with the intuitive sense of rightness of the sensitive artist.

Judging from results, painted wall patterns give a perfectly feasible means of modern decoration. However, they must be meted out with the same nicety of judgment which the talented French chef employs when he flavors the *potage* for a cultivated connoisseur with a rare old wine, knowing that its delicate bouquet will not be lost on unappreciative senses. Painted patterns are not to be confused with wholesale wall-coverings, for they should in no sense act merely as a substitute for rolls of wall paper or buckets of paint. Rather should they fill a special rôle, by being the beckoning centre of interest, or, as over-mantel decoration, as enrichment for the fireplace side of a room, and very occasionally, on all four walls of a special room of standing similar to the old so-called "parlor" or "best room." They should be served as the revered *cordial* with delectable finesse, not as the roast beef and boiled potatoes.

The historical origin of early American painted patterns and frescoes seems not a whit less whimsical than the design of many of the patterns themselves. Tradition has it that when the Hessians were forced out of work by the victorious colonists and needed the wherewithal for beer and pretzels, some of their number fell to work as mural painters and stencillers. Certainly, the fondness for letting the Prussian eagle roost at random in many designs gives credence to the story. However, in such a design as that of the dado of the Gray

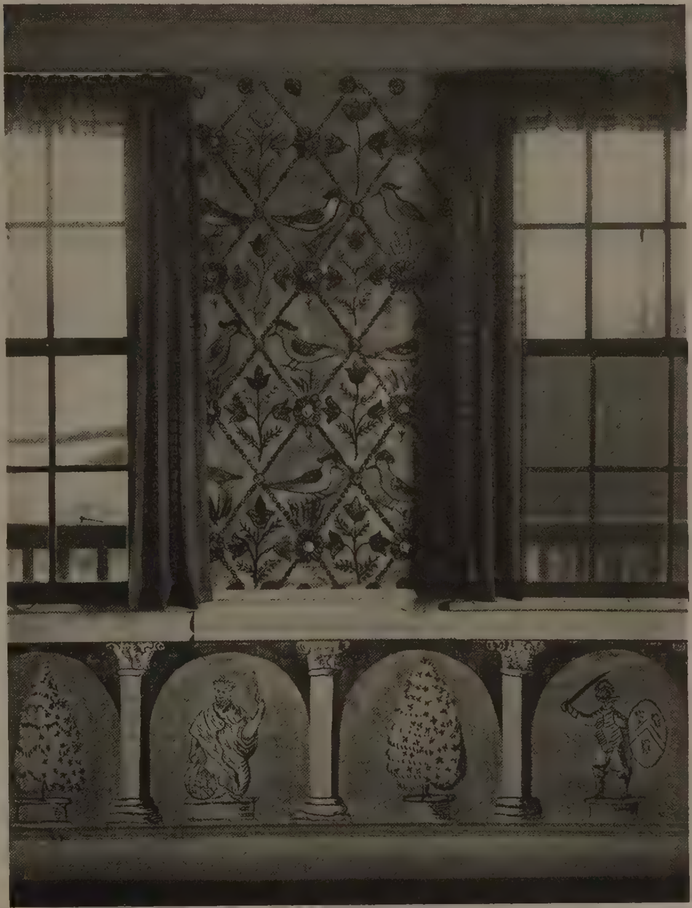


Detail of centre motive



Detail at corner of room

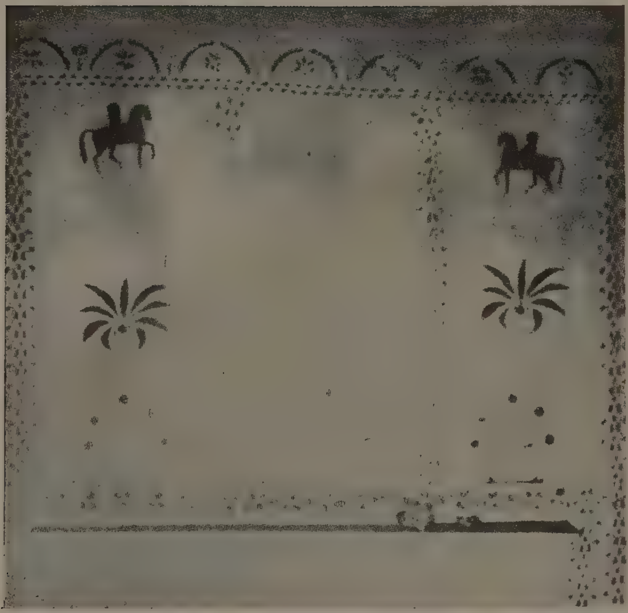
Fresco in the parlor of the Waid-Tinker house, Old Lyme, Conn. The room is about 15 feet square and 8 feet high, with tapestry frescoes which rank among the most ornate of their kind. They are executed in oils, the dominant tone being a bluish green-gray, which passes from soft minor shades to deep, rich tones, relieved by soft shades of buff and red, producing an unusually rich effect house on this page, one must give the worthy Hessian credit for an unusual sense of humor, having perched a *Vaterland* eagle on one lady's hand, while dolling up another with a Gainsborough hat and feather. Mr. Allen puts forth the suggestion that many of the designs come from the "Dutch" dower chests of Pennsylvania, as well as the glassware, pottery, and embroideries of that State. Other designs display marked Classic Romanesque characteristics, as the arches and columns dado of the Gray house, and that of the Waid-Tinker house on the page opposite. The wall above the dado of the Gray house recalls so strongly some of the wall decoration schemes of the Château of Blois, or Florentine palaces such as the Davanzati, that one is delighted with the cosmopolitan background of the designs and their authors.



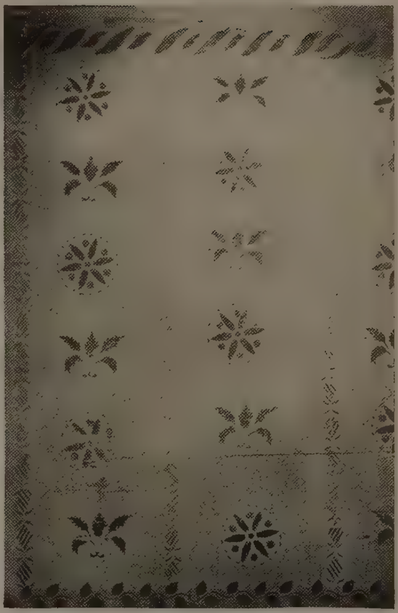
Wall and dado fresco in the parlor of the H. W. Gray house, Old Lyme, Conn. Above the dado the background is buff, the lozenge-shaped panels outlined by black beaded lines or cords; the facing turtle doves are blue and white or blue and red. The dado has red arches, white pilasters, and buff panels on which are painted classical or dramatic figures in black-and-white outlines, alternating with white evergreens having black stars or needles

In general it may be said that the painted wall decorations may be divided into two groups: murals, depicting scenes and landscapes entirely in free-hand; and stencilled patterns, in which a part of the repeating design was reproduced mechanically but refreshed by free-hand touches later. It should be appreciated that the old stencilled patterns were in no sense of the same category as the present-day product conjured up by the term "stencil design," which is mechanical from start to finish, and which makes no pretense at being adjustable to varying conditions of space. It is this latter consideration which makes the fine old patterns an adaptable possibility for the modern room, be it in the Colonial style or Egyptian. The underlying principle is perfectly sound: ornamentation was varied as well as related, by being composed of certain repeating units. These, however, were of such size and relation to each other that, when the space available became greater or smaller in either or both directions, the design could be so adjusted by the juxtaposition of its parts that the result was entirely in harmony with the regular unit. Such designs as those on page 278 and page 279 lend themselves to considerable jig-saw puzzle manœuvring, but a more ingenious arrangement must be resorted to in such a scheme as for Mr. Dana's morning room, where the space between windows varied, and a substitute for the usual pilaster was necessary. After all, the most agreeable of the patterns are apt to be those where some irregular space conditions have required an adaptation.

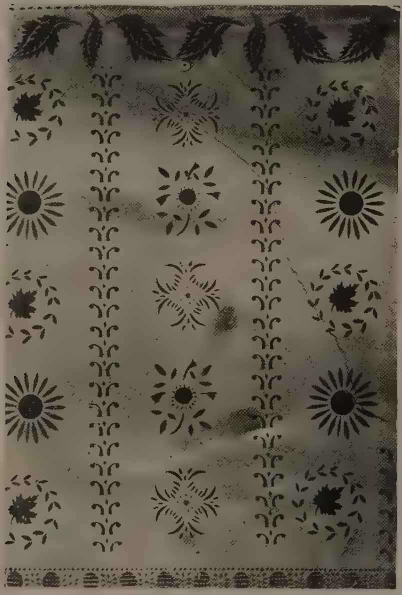
For modern usage the architect is more likely to find opportunity to use the stencilled rather than the mural type of painted wall decoration. While in general the effect of the one compared with the other is quite different as regards subject-matter, from a purely decorative standpoint the Colonial prototypes are alike in exhibiting tapestry qualities. As Mr. Allen points out in his "Early American Wall Paintings,"



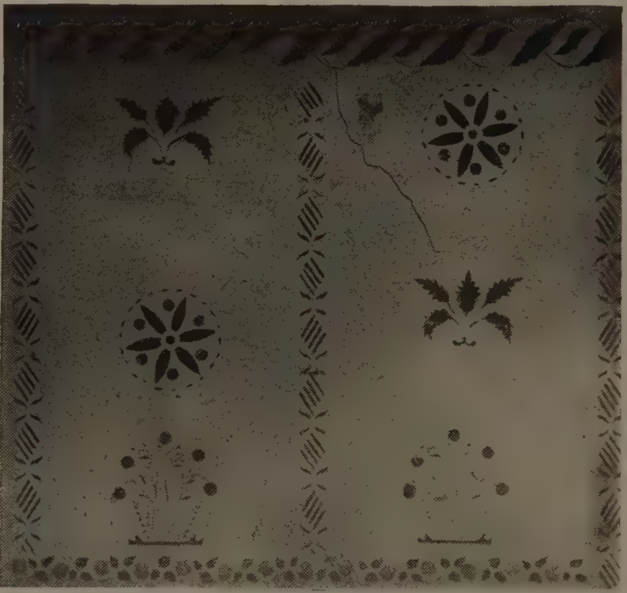
Over-mantel stencil in an upper chamber, Mather house, Marlboro, Vt. The square space is divided into three vertical panels, the one on the outside at the right extending to the floor



Panel in an upper chamber of the Mather house. Vertical panels on a soft, pale rose-pink background

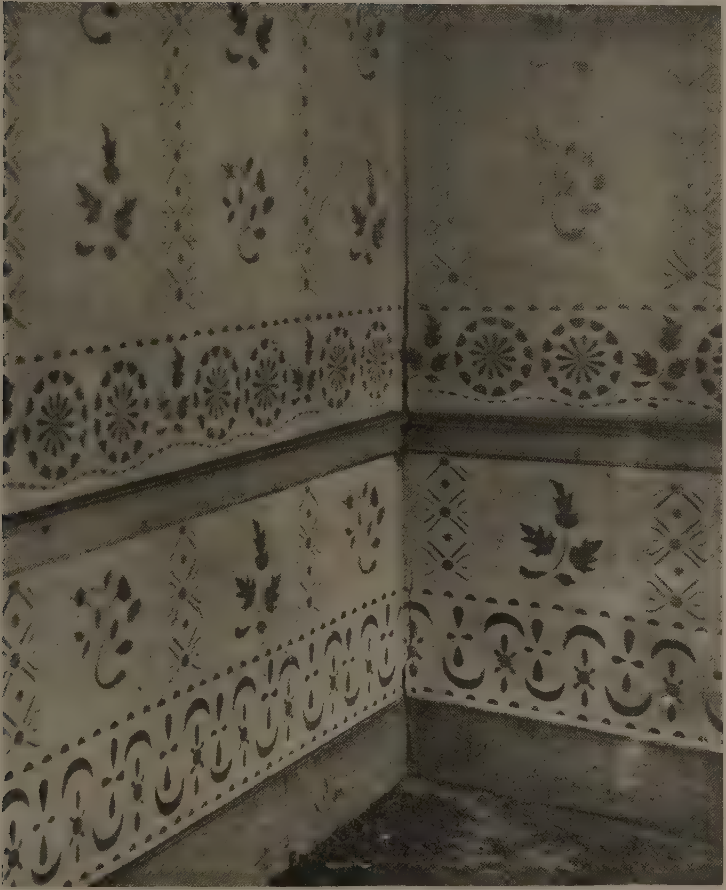


Stencil design in the Grant house, North Saco, Me. The oak leaves are similar to those of the Mather house

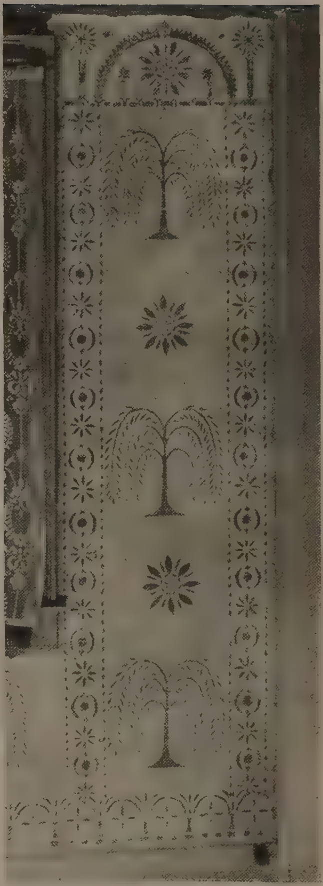


Over-mantel stencil in an upper chamber of the Mather house. This design and color scheme is the same as that above, but with the addition of a flower-basket group

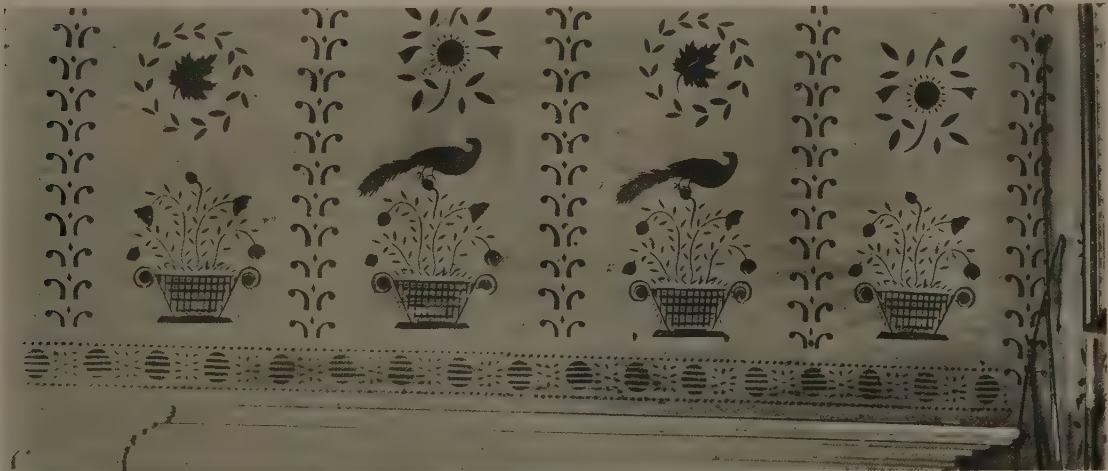
the group of "frescoes" still extant in the Connecticut River Valley, "when viewed from across the room have the appearance of old Flemish tapestry, not only in those pieces in which the faded greenish blues and grays predominate, but the bright colored ones as well, with red and yellow tones. The resemblance is greatly increased by the border which surrounds



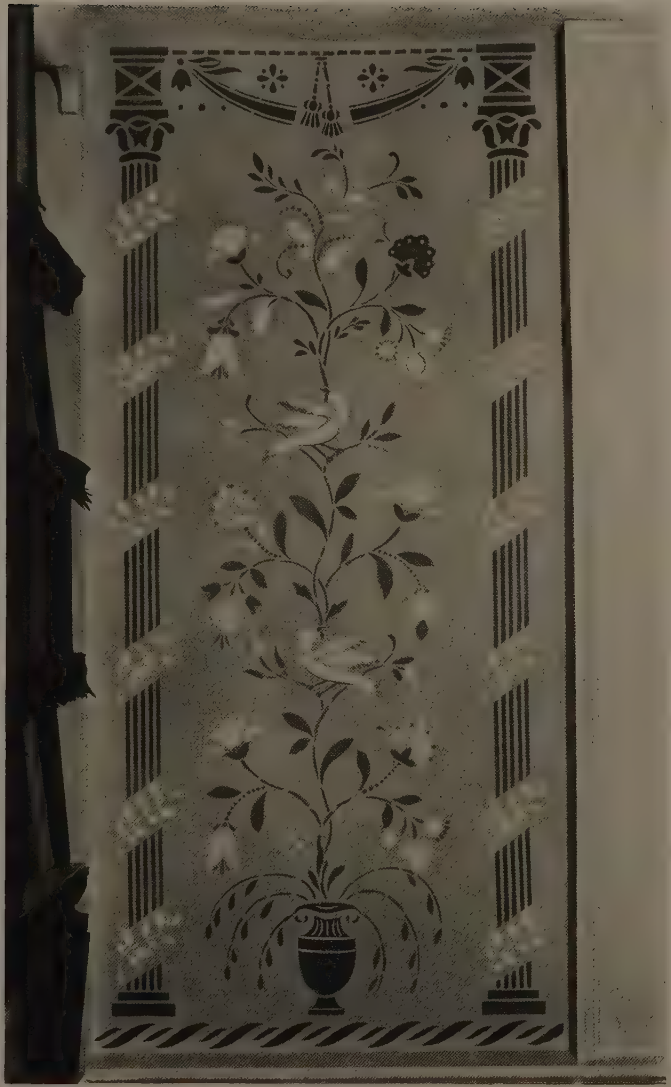
In the guest chamber, Coolidge house, Plymouth, Vt. Built about 1820 by the great-great-grandfather of the President, this house had the distinction of every room except the kitchen being stencilled in tempera; the designs were often mosaic-like



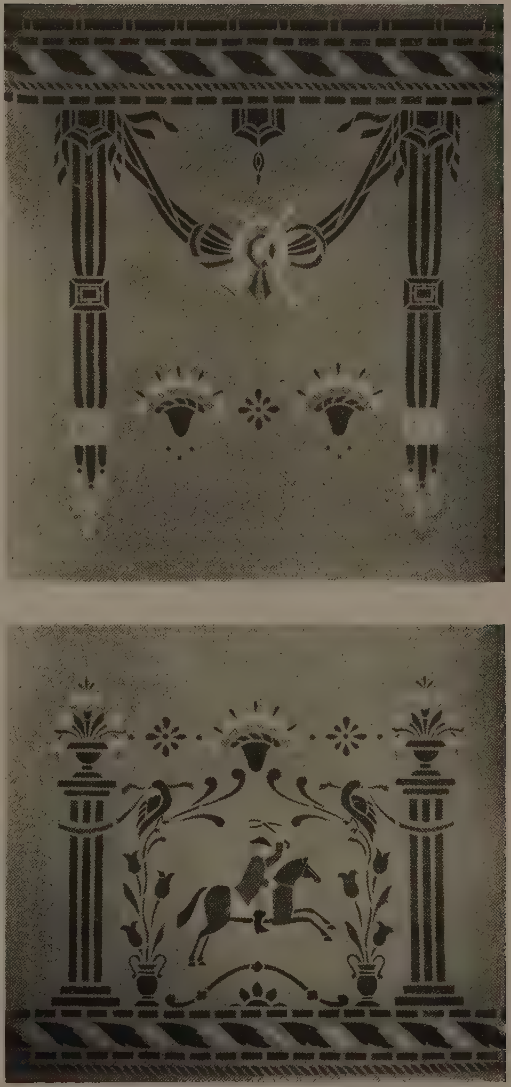
Fresco in the ballroom, Hubbard house, Cromwell, Conn. This illustration reproduces the design adjacent to a window



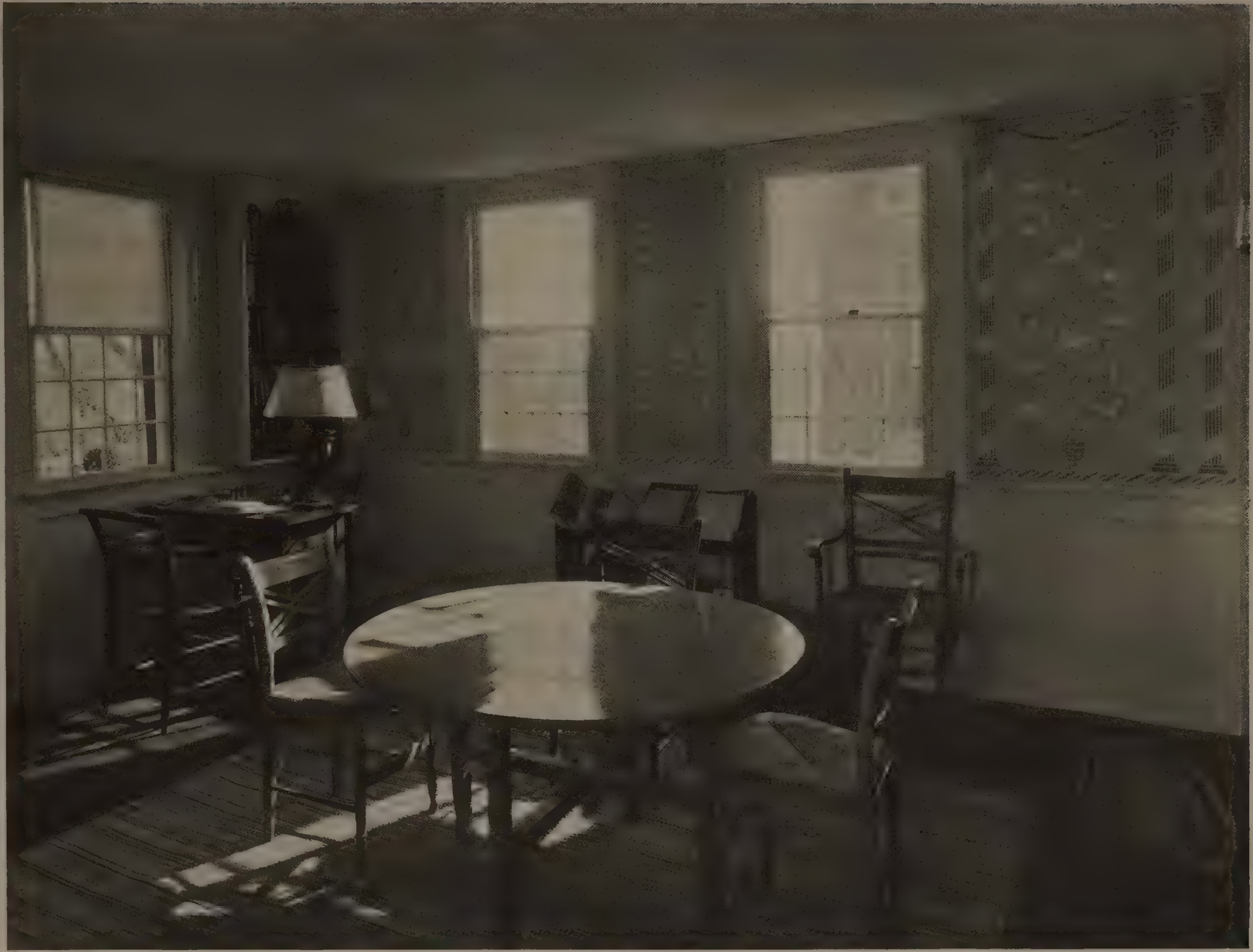
Stencil design in the Grant house. The background is a dull gray, the birds red with black wings, the borders and stripes are brown; the stalks, tulips, and buds are in red and green; the sunflower, orange with a dark brown centre



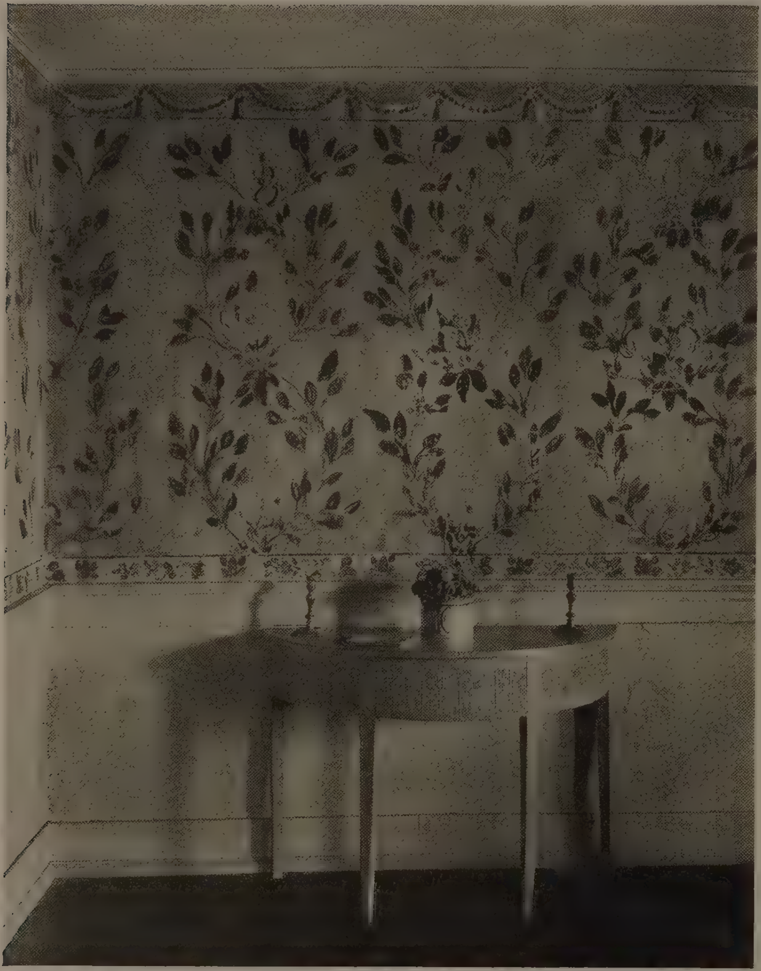
Detail of morning room of Highfield, Washington, Conn., house of Richard H. Dana, Jr., Architect. The use of this repeating panel can be located in the illustration on the page opposite. The background is a warm light yellow, between an ochre and orange; the architectural details are purplish; the foliage a greenish blue; the leaves, flowers, and birds have a considerable amount of white; the hand-touches are vermillion



Top and bottom of a panel designed for the cloakroom at Arden House, the home of Mrs. E. H. Harriman. On a gray-green background the lines of columns and ribbons are a gray purple; the lightest tint is a warm white; black, buff, red-orange and yellow ochre are the subordinate colors. Arden Studios, Decorators



Morning room of Highfield, house of Richard H. Dana, Jr., Architect. The wall opposite this one was more regular and was able to accept the regular unit without much alteration, but this view is given to illustrate the pleasing manner in which the medium will accommodate itself to irregular spacing

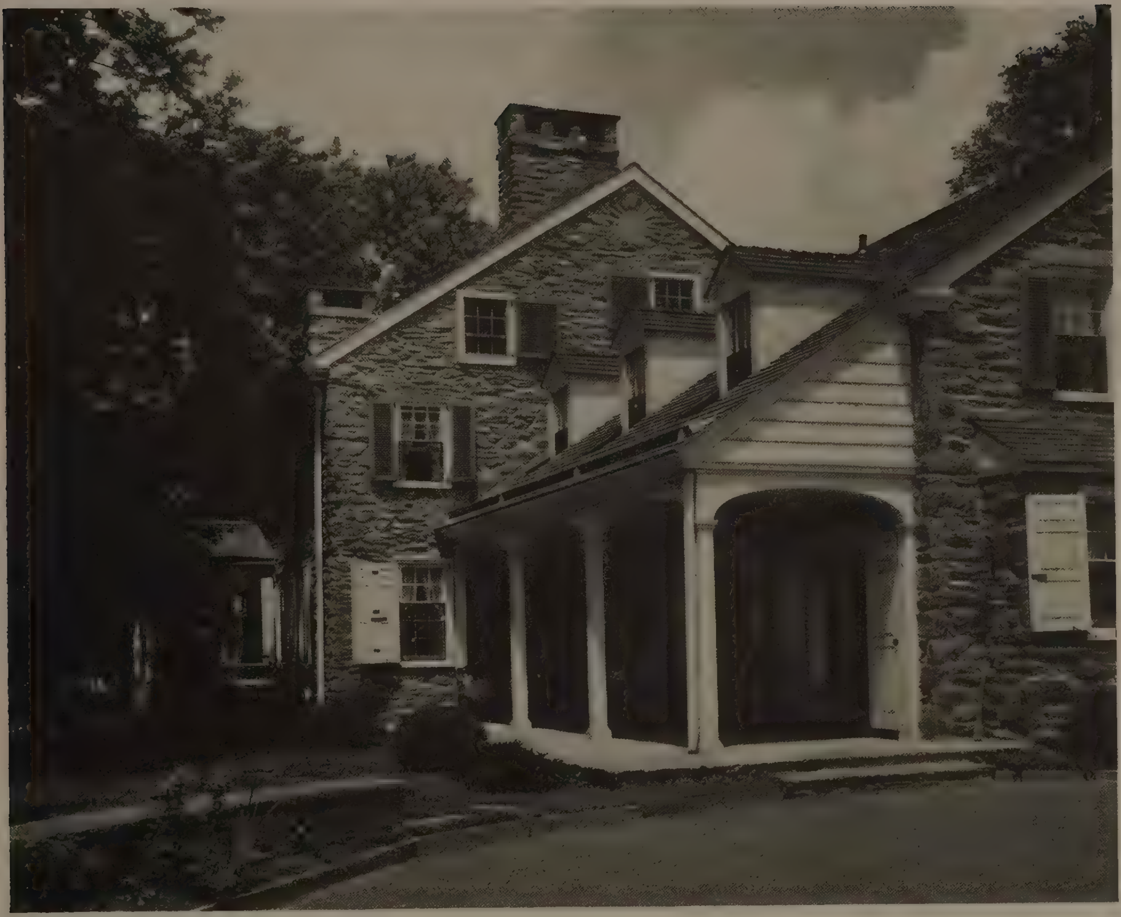


Panel in the Jaynes house, East Setauket, Long Island. This design was painted free-hand in oil on a background of greenish blue, giving a wonderfully soft tone. Around the doors and windows is a border

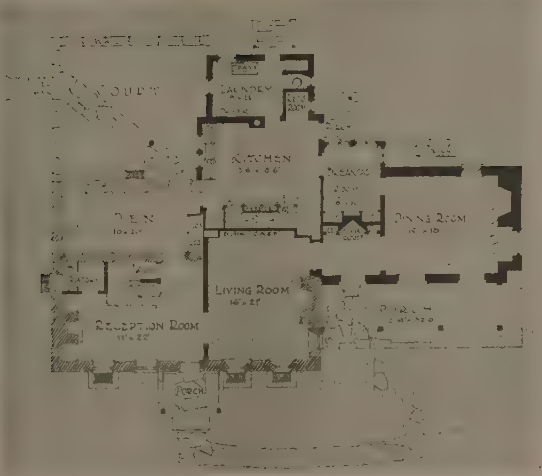
each section of fresco." It is self-evident that unless the painted patterns possess this hand-made, lived-with quality, they are certain to be disappointing. If they are purely mechanical, either in the design being unaccommodating to irregular spaces, or the execution lacking in variation and hand-touches, then there is no advantage over a good wall paper. Incidentally, when the patterns are applied in a craftsmanlike manner with flat wall paint, the meticulous housekeeper can wash the walls.

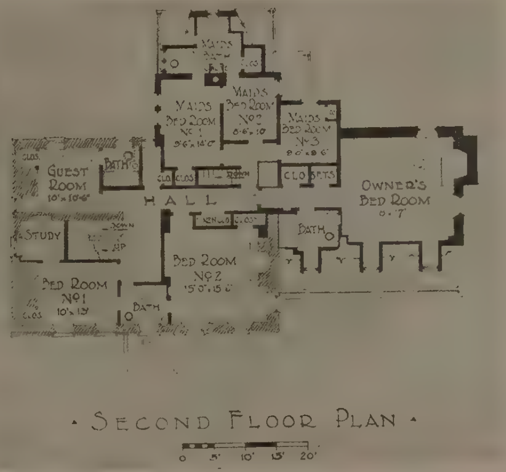
Miss Bridgman and Miss Erskine are generously frank in explaining the practice they have found most satisfactory in simulating old Colonial painted patterns. In the first place, any surface which is properly "sized," and will accept paint, is suitable for this means of decoration. Not only may plaster walls be enriched, but wood panels as well, such as the well-known Marmion room in the American Wing of the Metropolitan Museum of Art, New York City. If there is to be an all-over background color, as would usually be used for the stencilled designs, this is advisedly built up of a number of coats of paint until the surface has a certain vibrating quality, rather than a monotonous tonality. In some of the latest rooms which these craftsmen-artists have completed, the paint has been applied with a cloth instead of a brush, by pressing a folded-up cloth wet with paint against the wall surface and allowing small spots of the undercoat to show through. This process is repeated until from a few feet away the effect is that of a rich damask material of puzzling weave, which has a pleasing general color value, and yet which seems composed of minute particles of related shades of the same general color. As many as six coats of paint have sometimes been pressed upon the wall. The design is then stencilled, and the hand-touches added later. Although the entire process sounds like a lengthy procedure, actually it is as rapid as the ordinary painting of flat wall paint, allowing of course the time necessary for "pressed" coats to dry. It has been the practice of the Misses Bridgman and Erskine first to execute small sketches for the determination of the general *parti* of both color and design, and then to work up full-sized panels in a number of color schemes, keeping a detailed record of the actual colors used.

So far flat wall paint has been the most satisfactory, yet it is hoped that the forgotten secrets of tempera may sometime be fully rediscovered, so that without damage to itself it may be thoroughly cleaned.

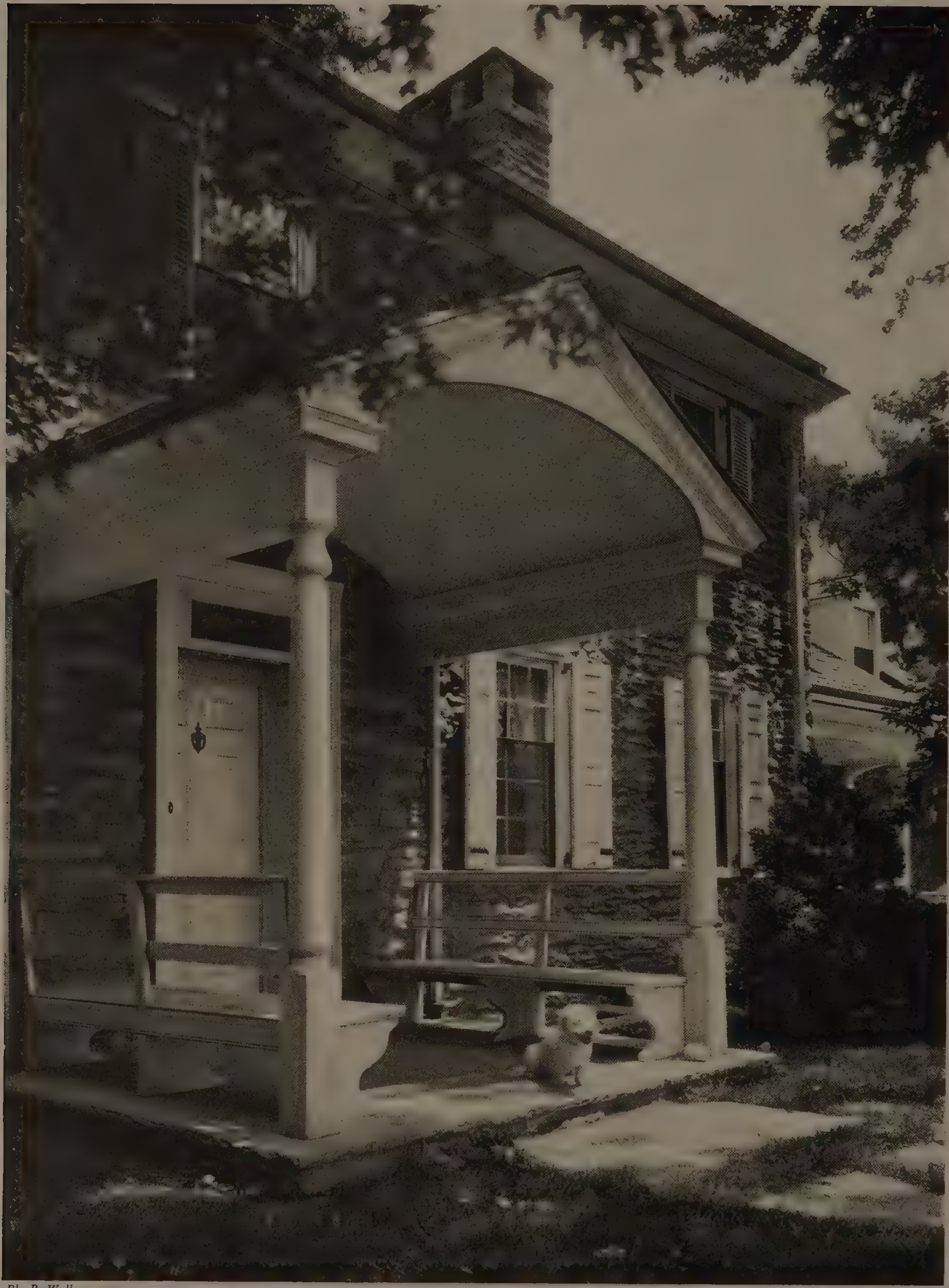


Alterations and Additions to House of
Winthrop Neilson, Ardmore, Pa.
FOLSOM, STANTON & GRAHAM, ARCHITECTS



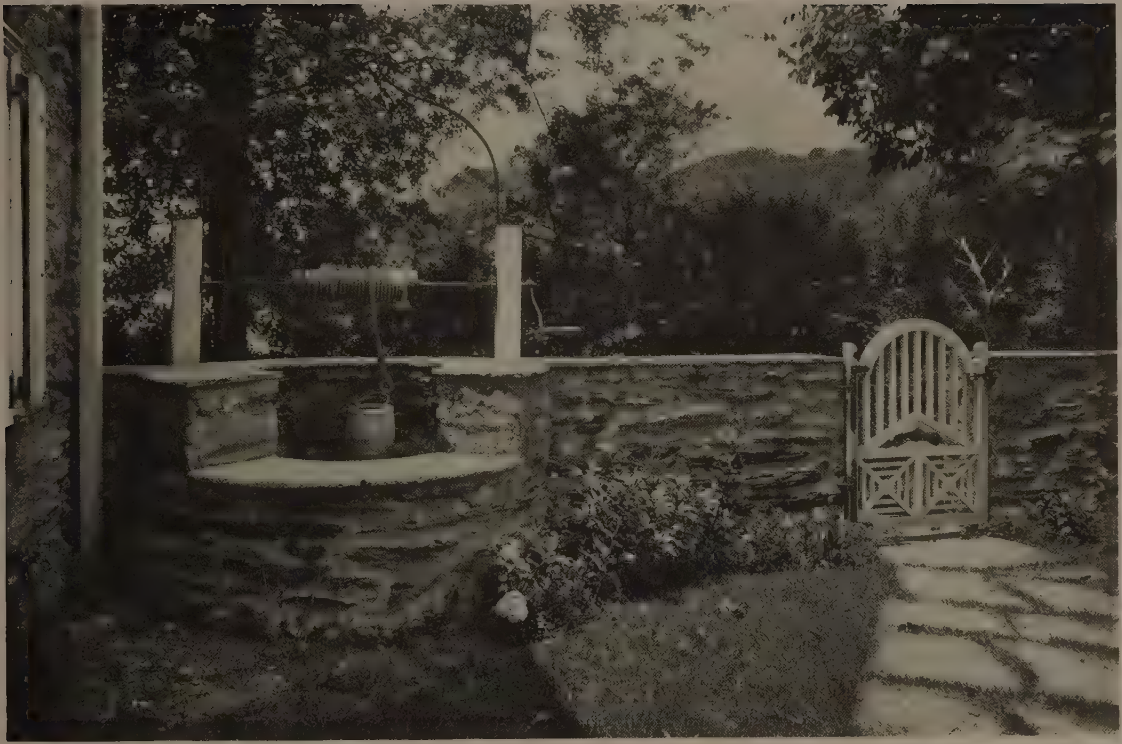


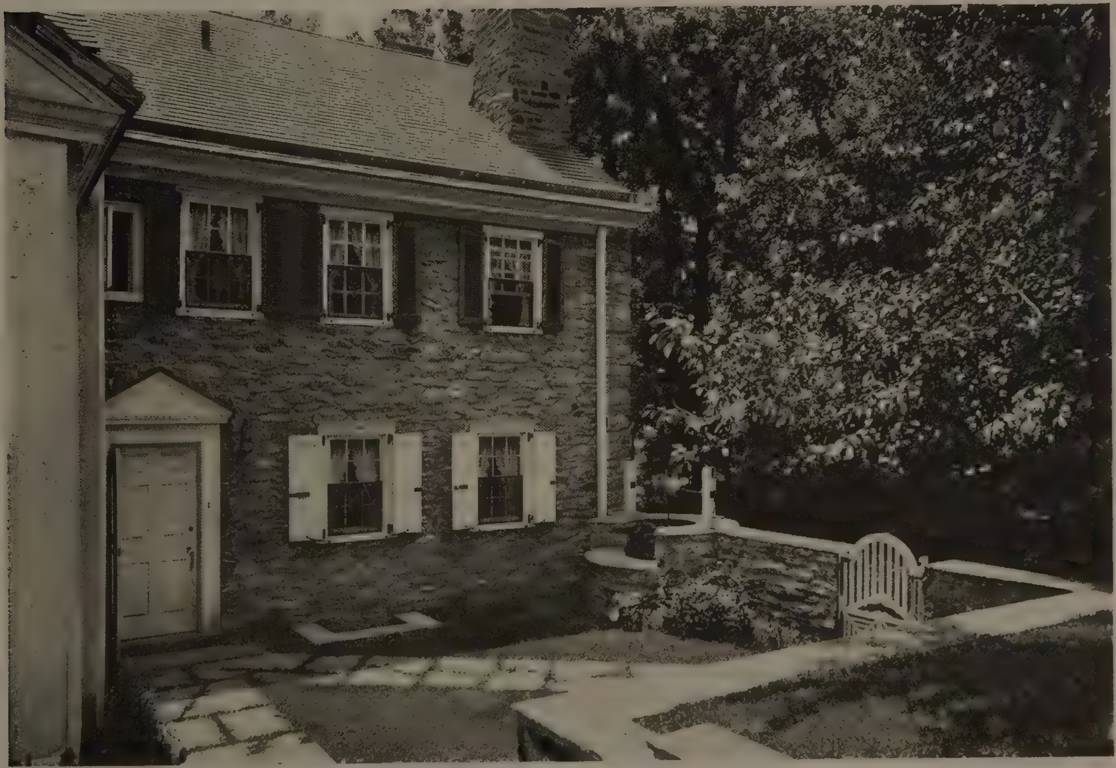
· SECOND FLOOR PLAN ·



Ph. B. Wallace

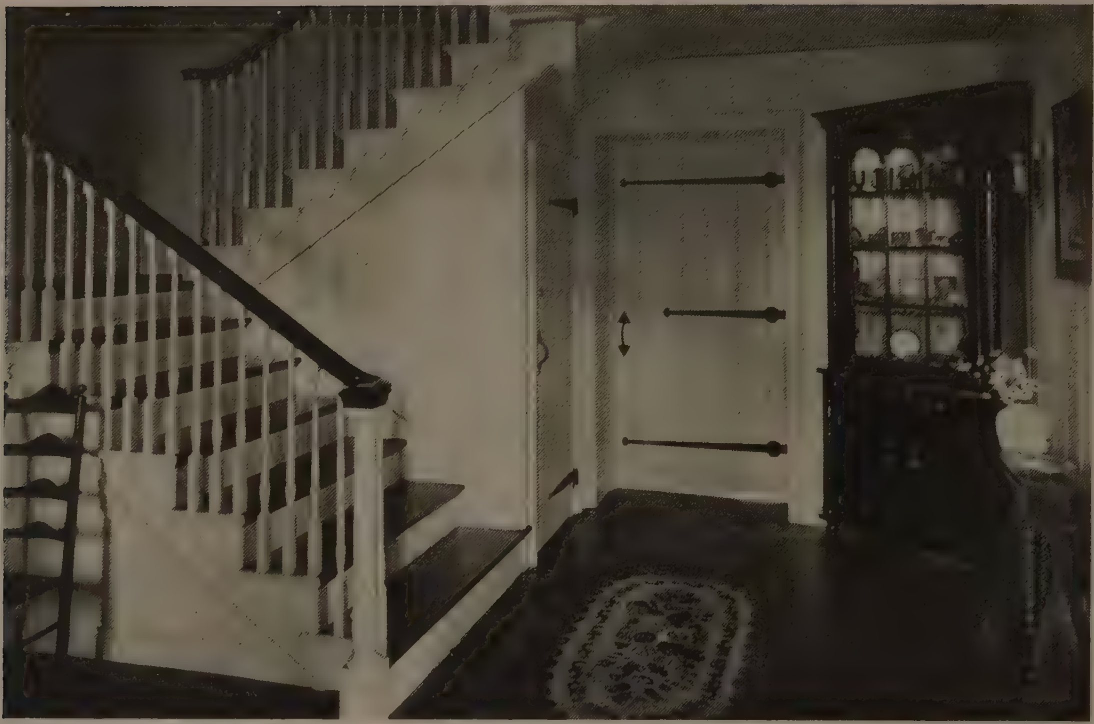
House of Winthrop Neilson, Ardmore, Pa. FOLSOM, STANTON & GRAHAM, ARCHITECTS

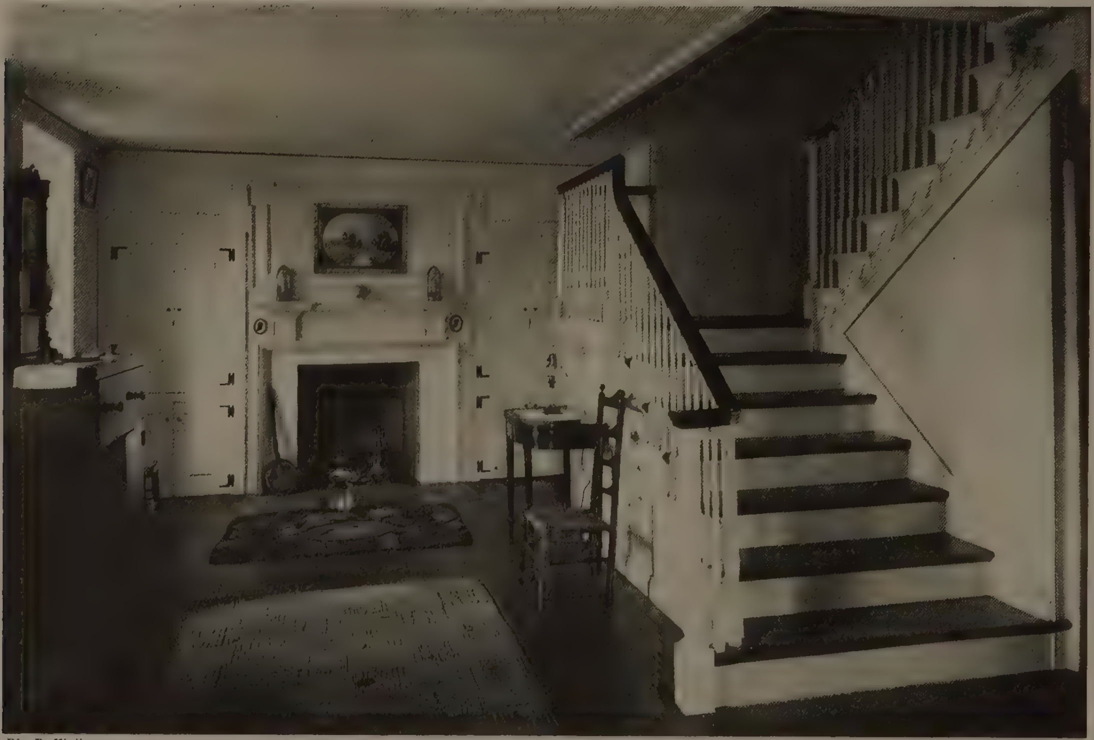




Ph. B. Wallace

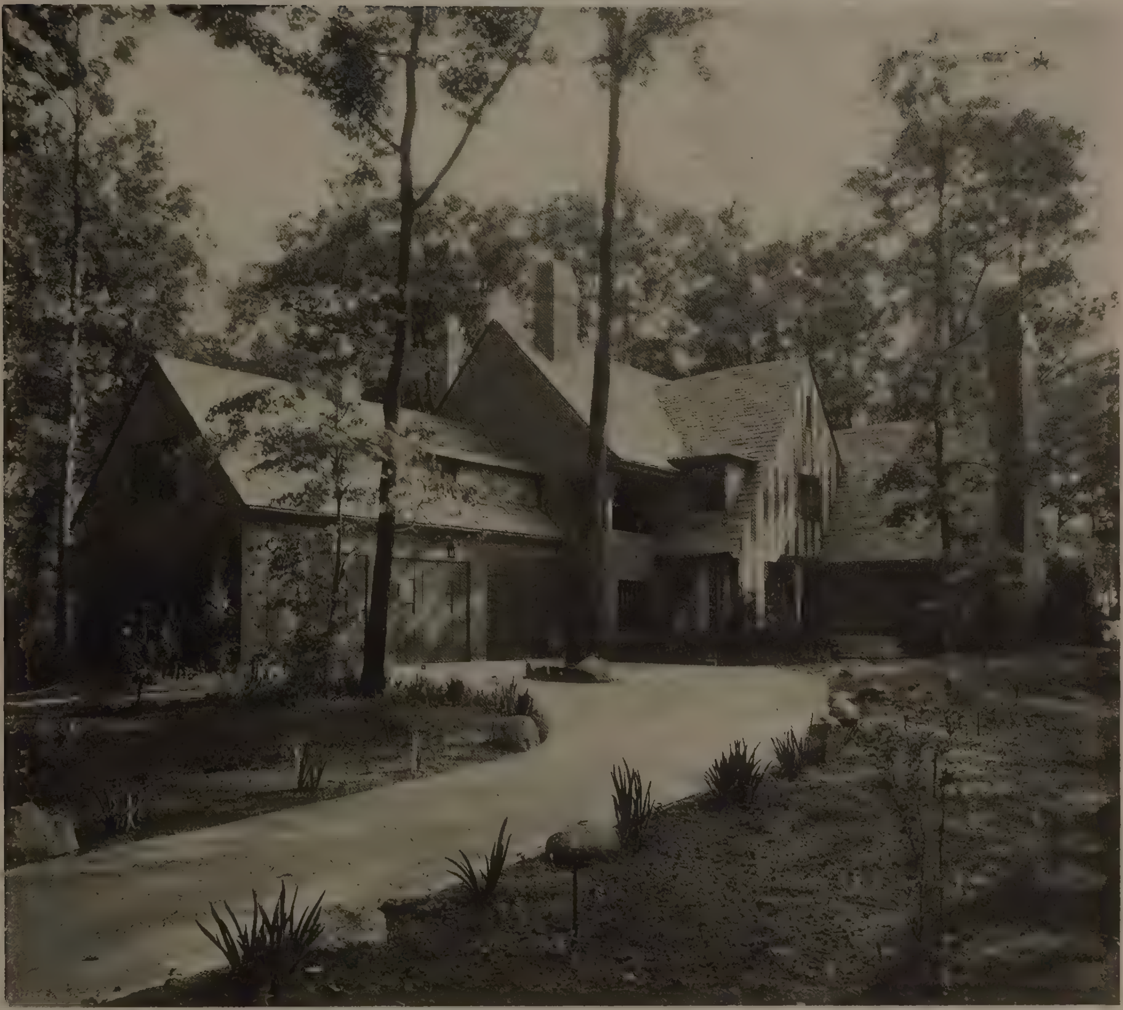
House of Winthrop Neilson, Ardmore, Pa. FOLSOM, STANTON & GRAHAM, ARCHITECTS



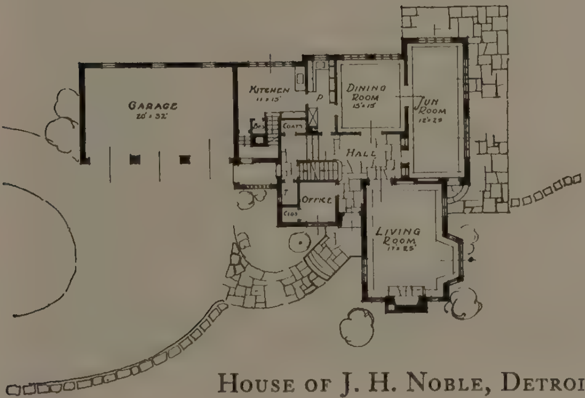


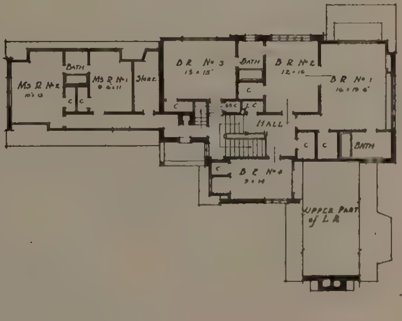
Ph. B. Wallace

HOUSE OF WINTHROP NEILSON, ARDMORE, PA. FOLSOM, STANTON & GRAHAM, ARCHITECTS



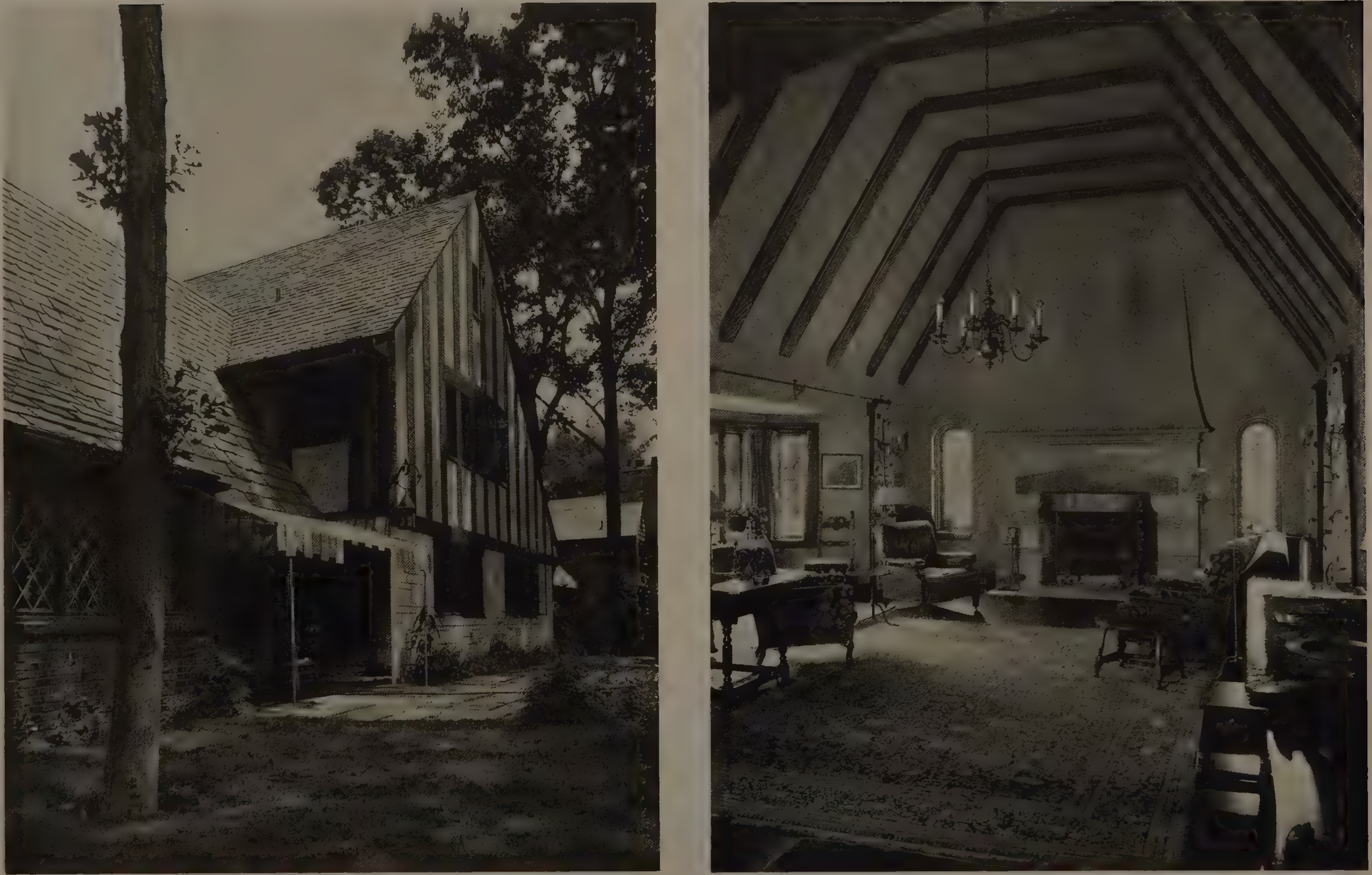
Thomas Ellison





House of J. H. Noble, Detroit, Mich.

RICHARD H. MARR, ARCHITECT



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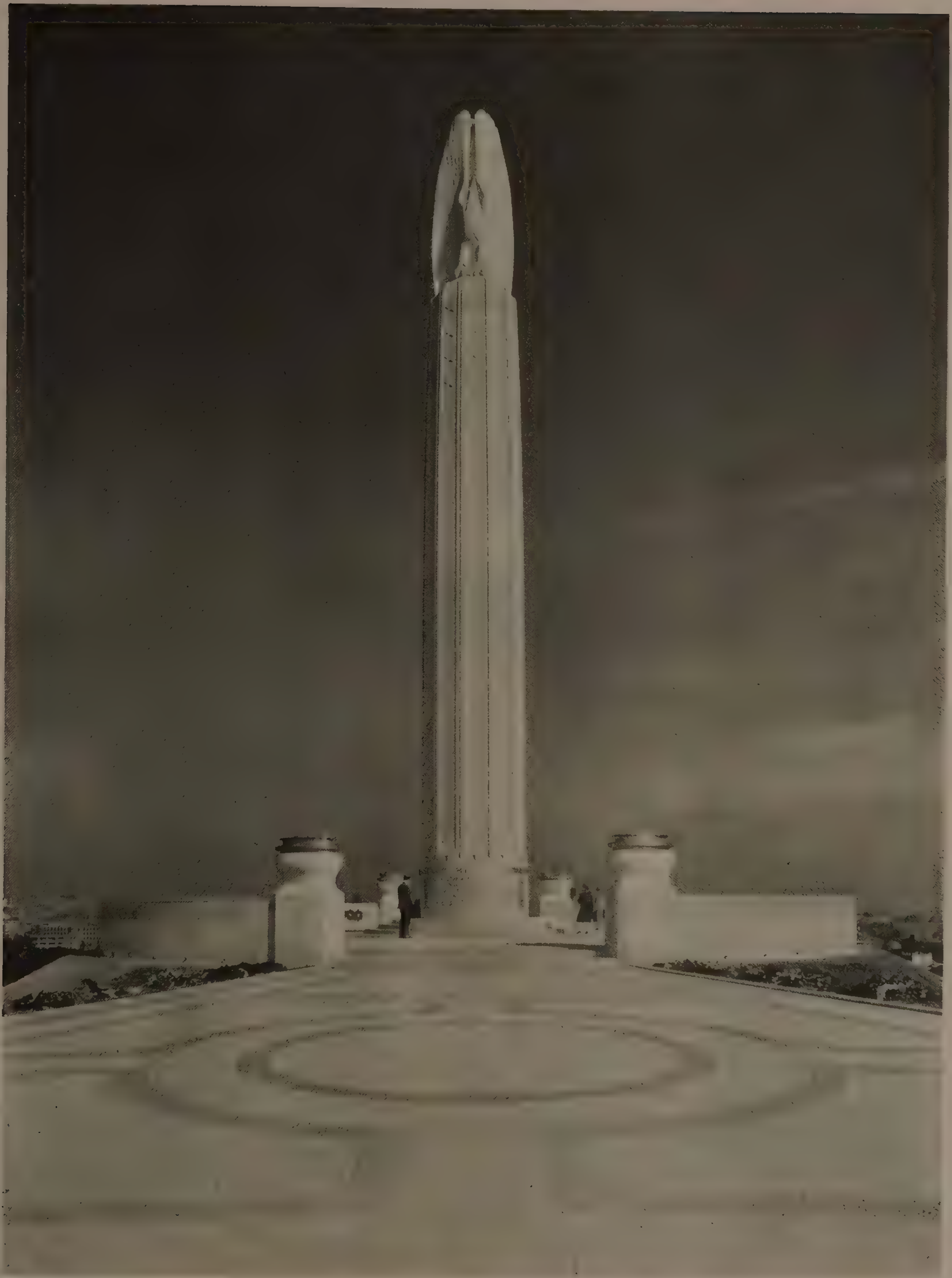
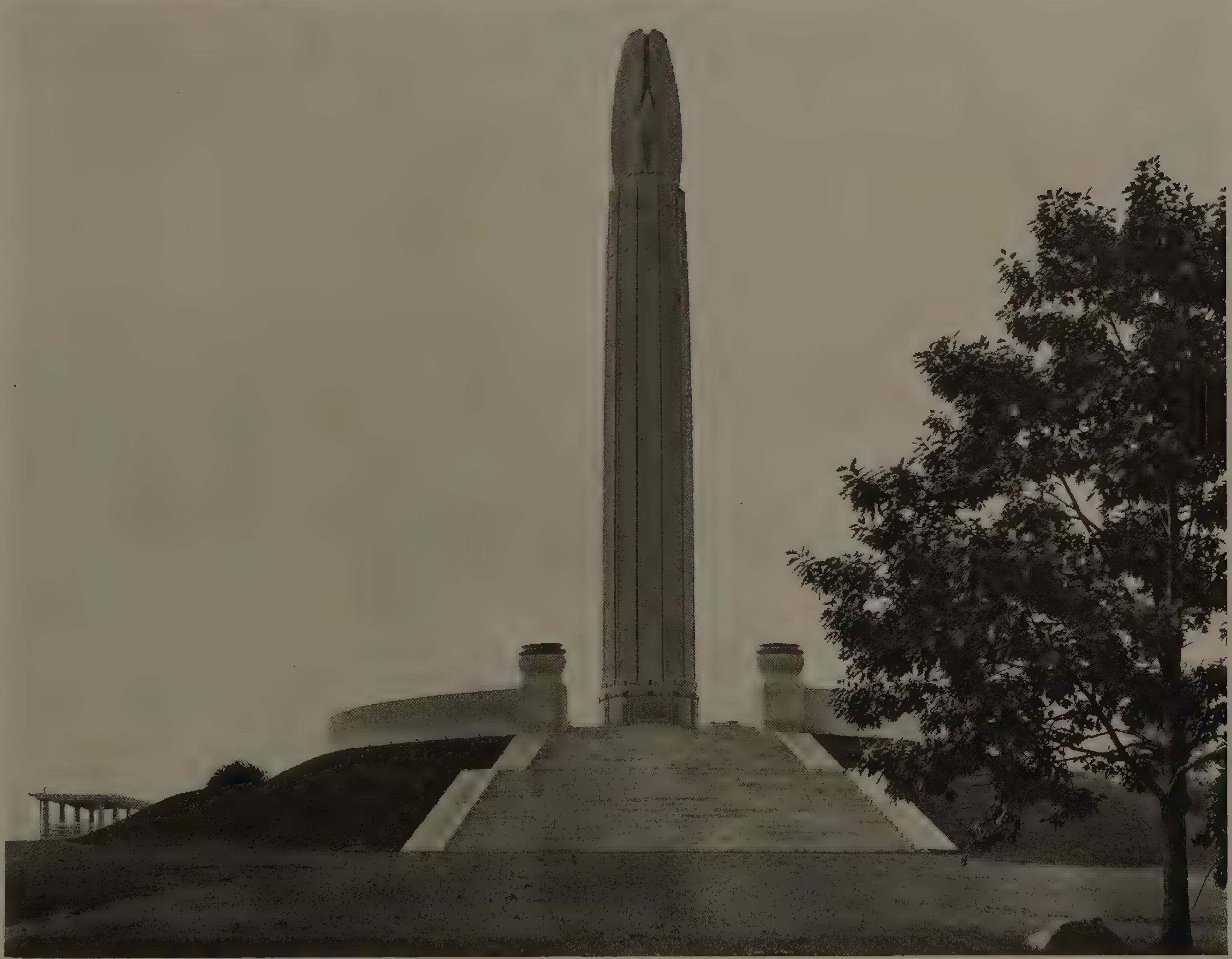
House of J. H. Noble, Detroit, Mich. RICHARD H. MARR, ARCHITECT



Richard Averill Smith

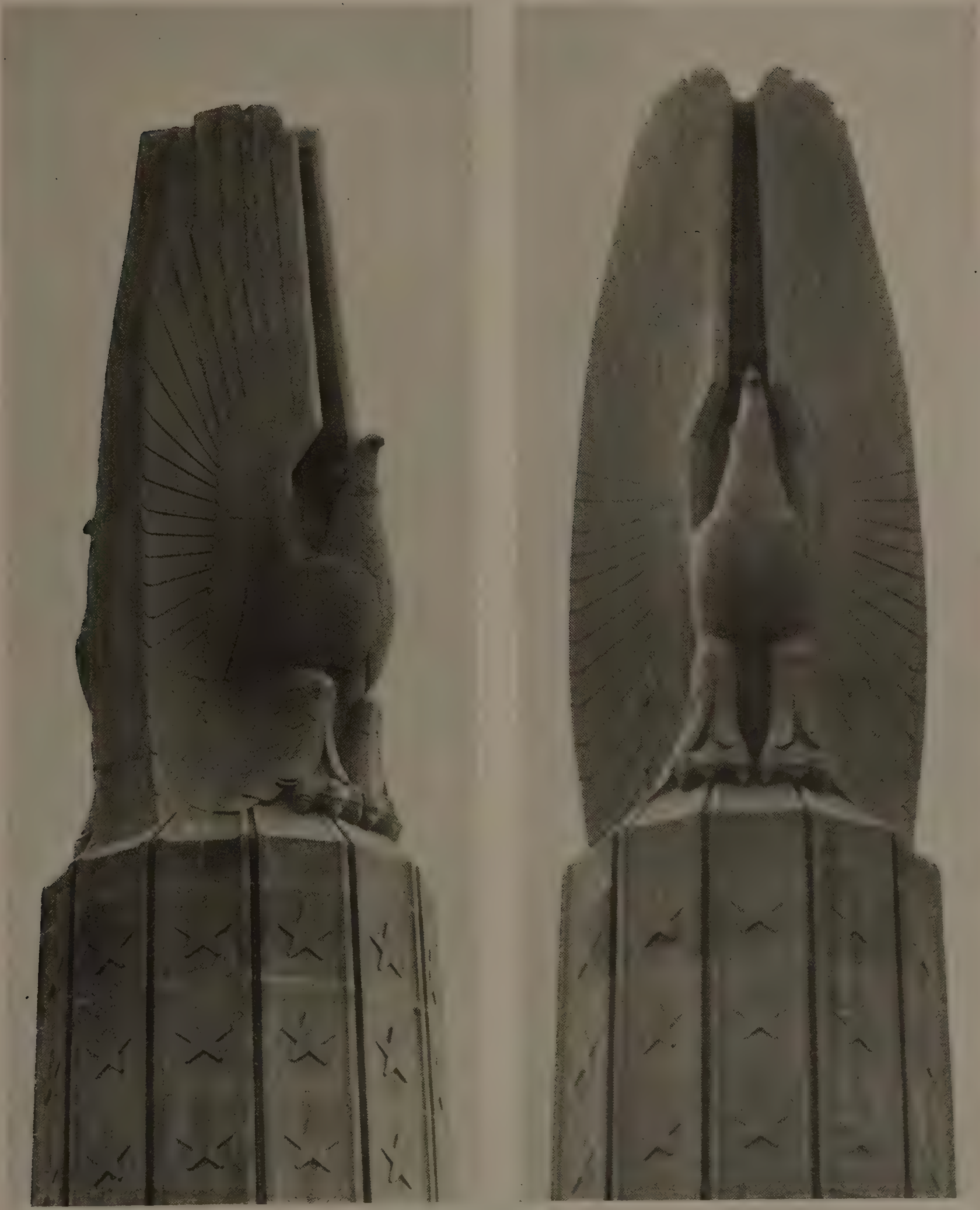
World War Memorial, New Britain, Conn. H. Van Buren Magonigle, Architect and Sculptor



Richard Averill Smith

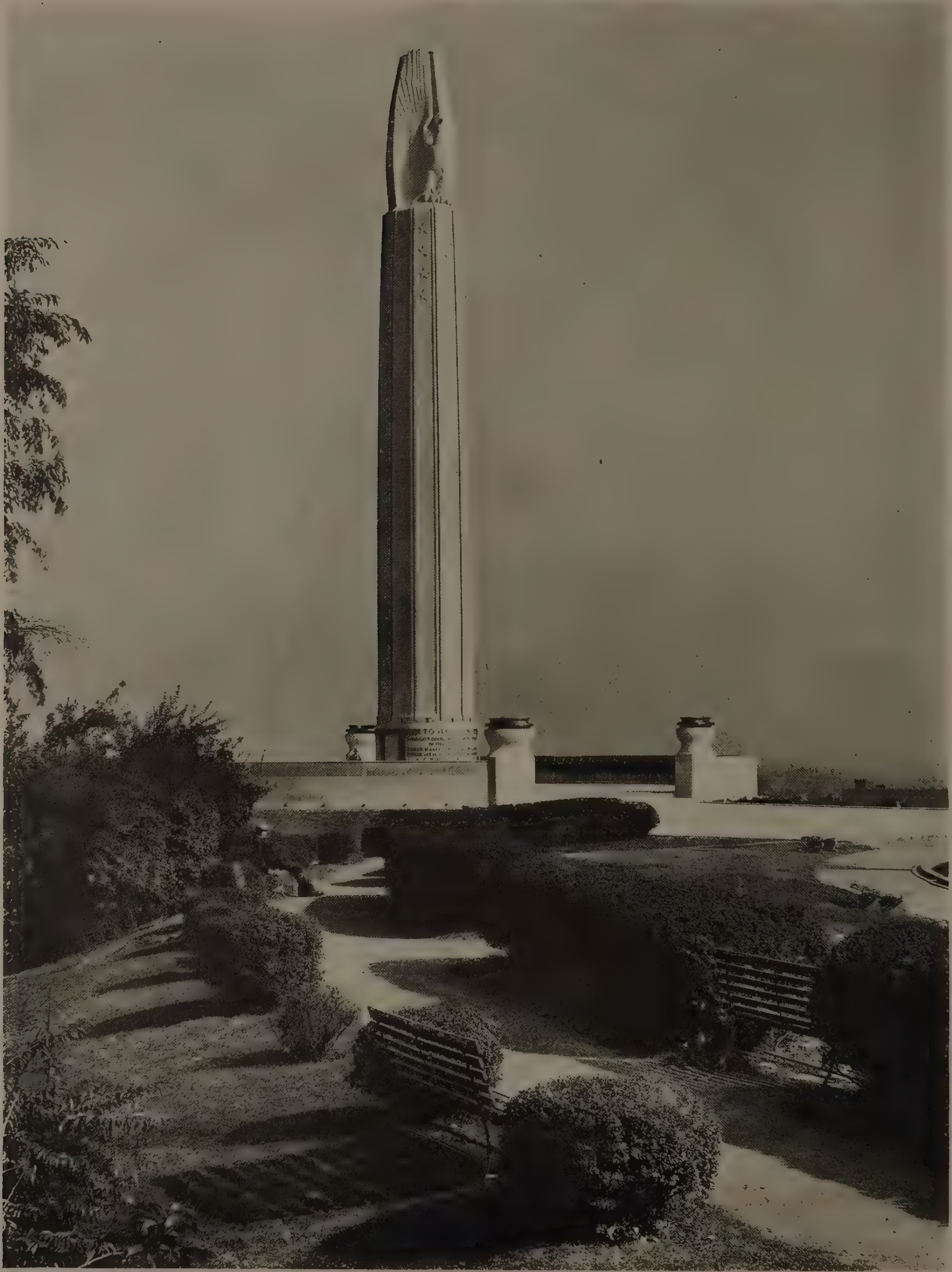
World War Memorial, New Britain, Conn.

H. VAN BUREN MAGONIGLE, ARCHITECT AND SCULPTOR



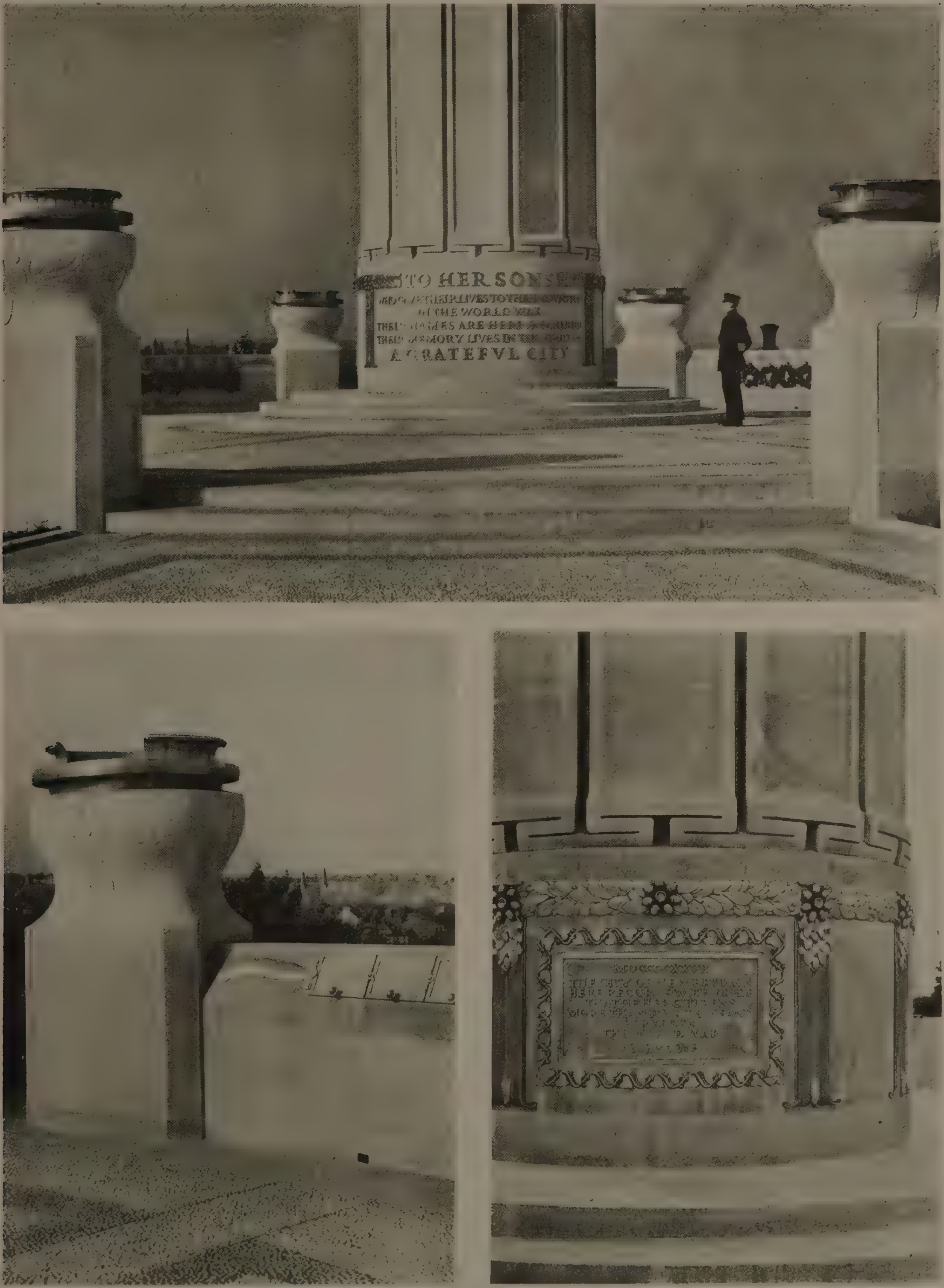
Richard Averill Smith

World War Memorial, New Britain, Conn.
Details of Top
H. VAN BUREN MAGONIGLE, ARCHITECT AND SCULPTOR



Richard Averill Smith

WORLD WAR MEMORIAL, NEW BRITAIN, CONN. H. VAN BUREN MAGONIGLE, ARCHITECT AND SCULPTOR



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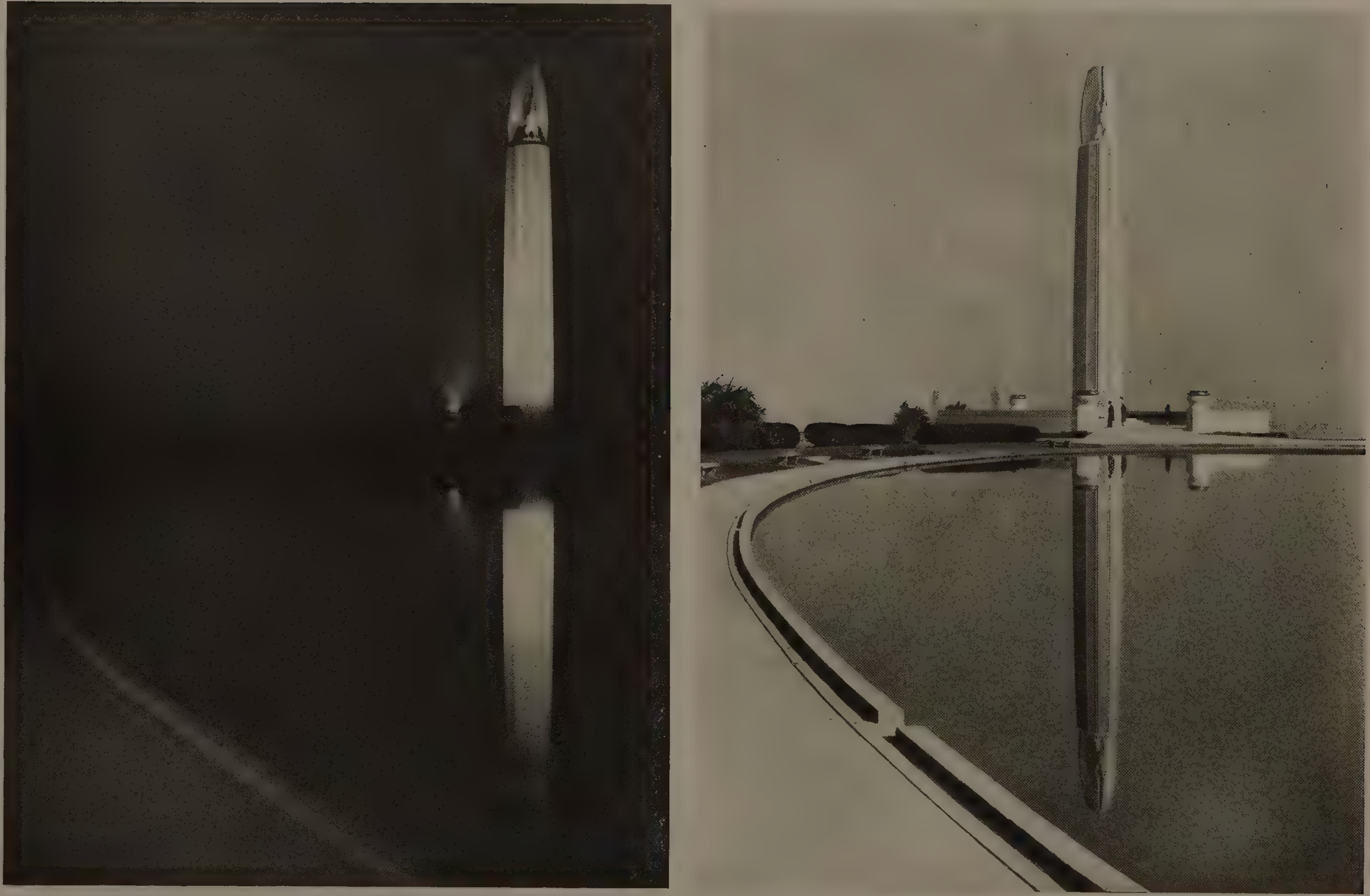
World War Memorial, New Britain, Conn. H. VAN BUREN MAGONIGLE, ARCHITECT AND SCULPTOR



Richard Averill Smith

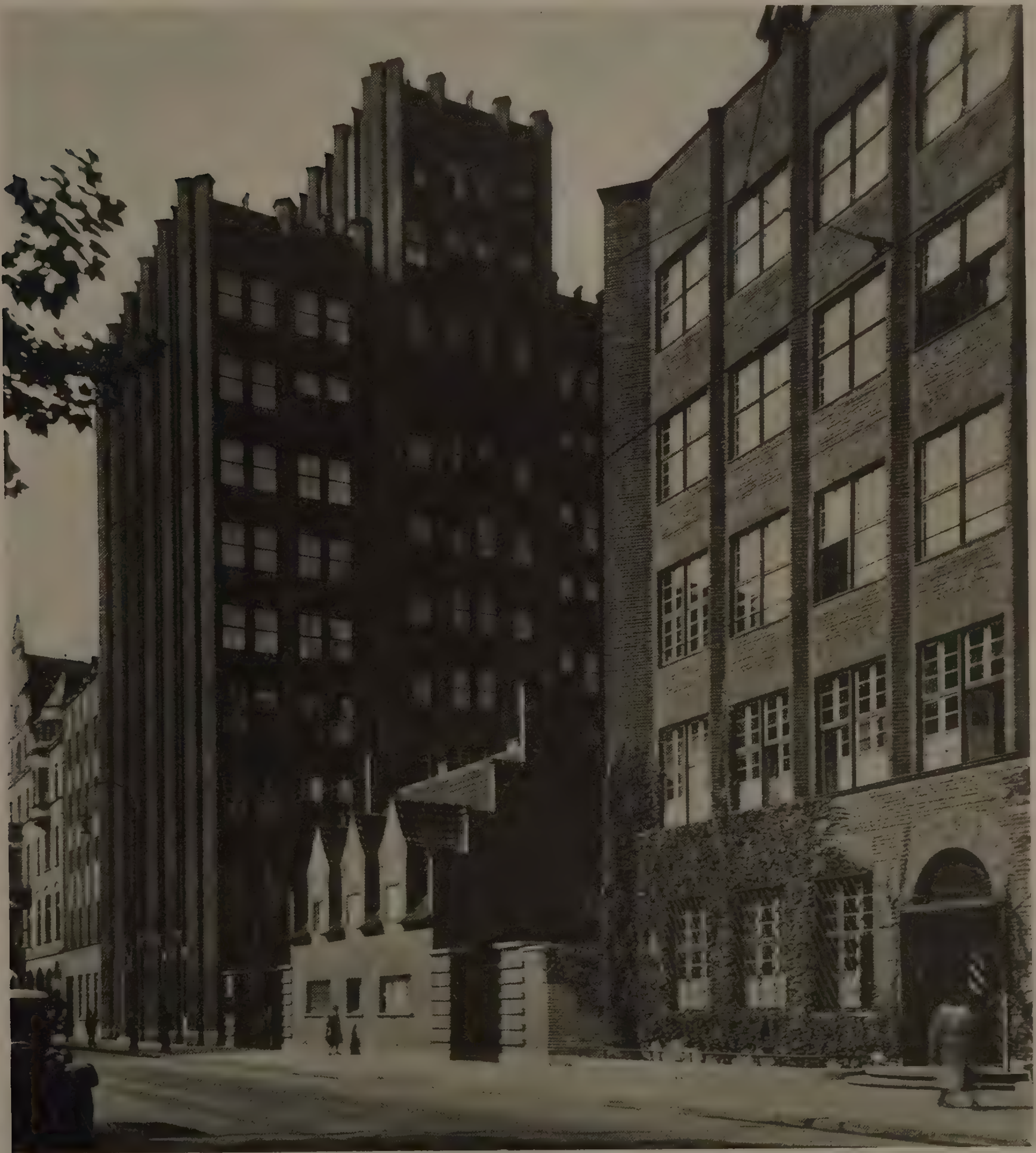
World War Memorial, New Britain, Conn.

H. VAN BUREN MAGONIGLE, ARCHITECT AND SCULPTOR

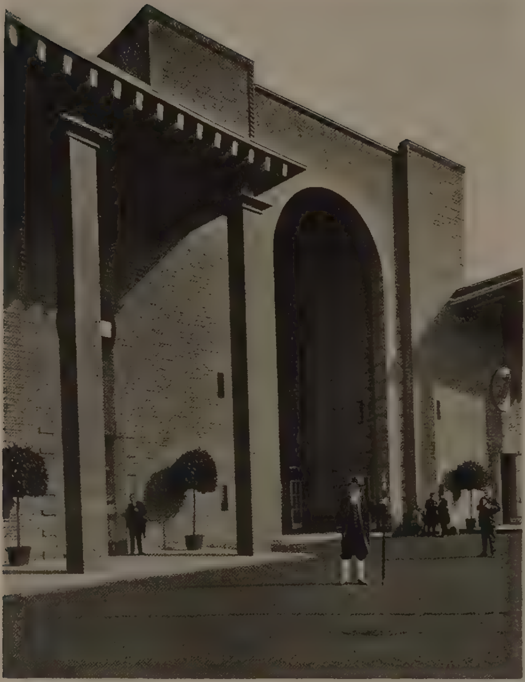
A Pictorial Review of Modern Architecture in Europe

By

HOWARD ROBERTSON, S. A. D. G., F. R. I. B. A., *and* F. R. YERBURY, Hon. A. R. I. B. A.



Commercial Building, Düsseldorf, Germany PAUL BONAST, ARCHITECT



Hall of Nations

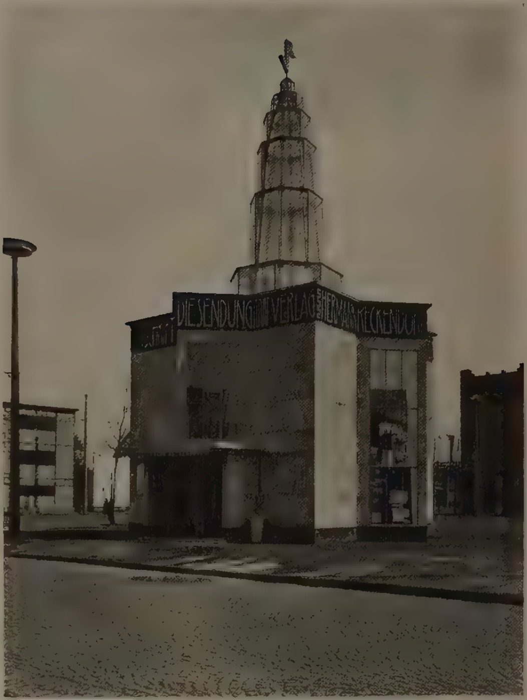
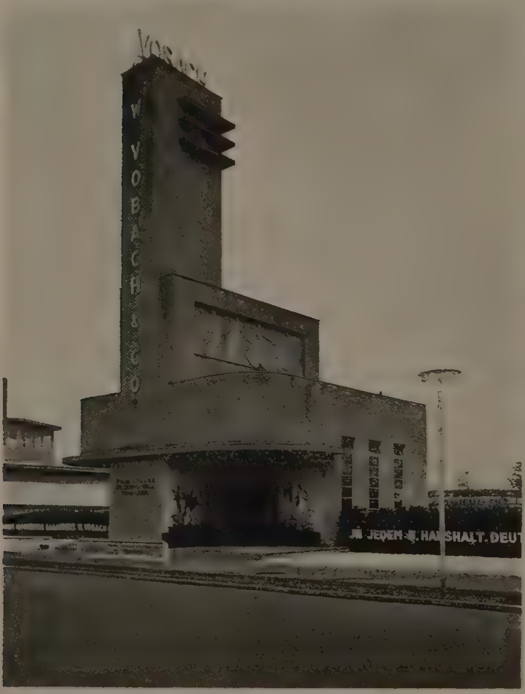


Exhibit of a radio magazine

DETAILS FROM THE
INTERNATIONAL PRESS EXHIBITION, 1928, AT COLOGNE

Architectural Board: Adolf Abel and Messrs. Wihel, Wiesmann, Mehrtens, Bougontz, and Schulte-Frohlinde



For the publishers of a women's magazine

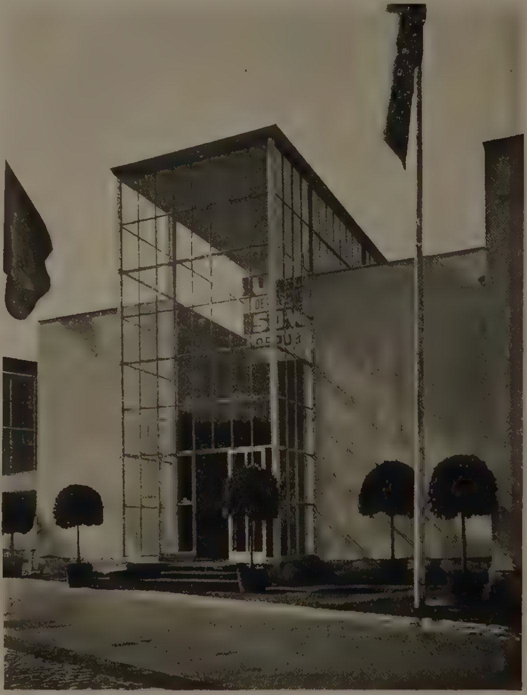
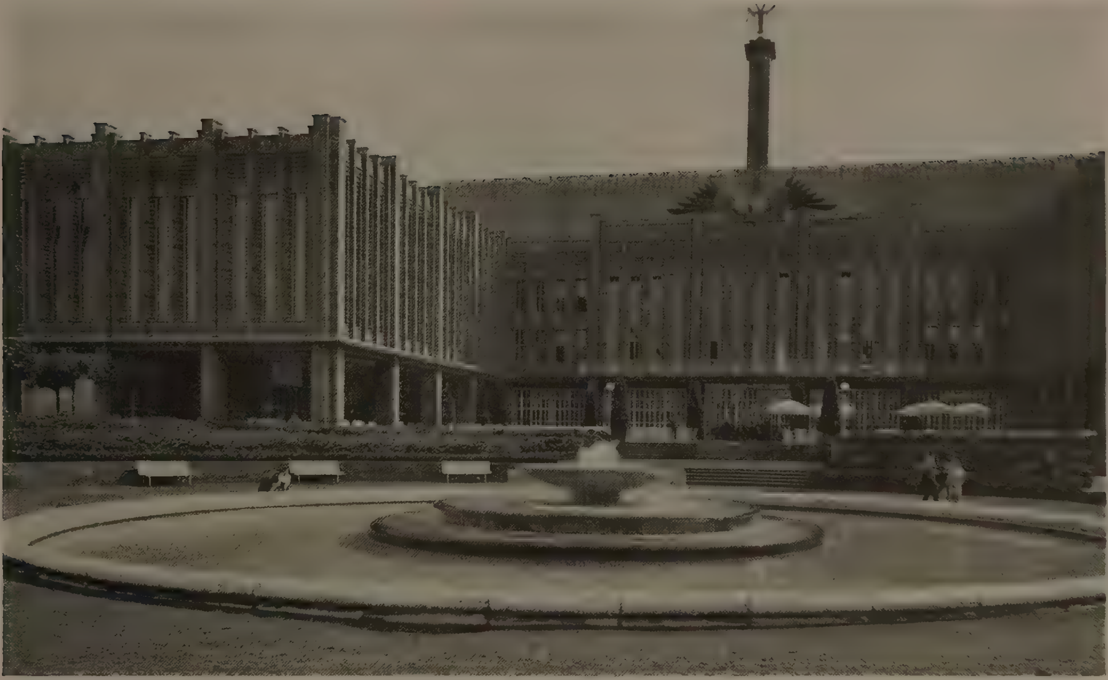
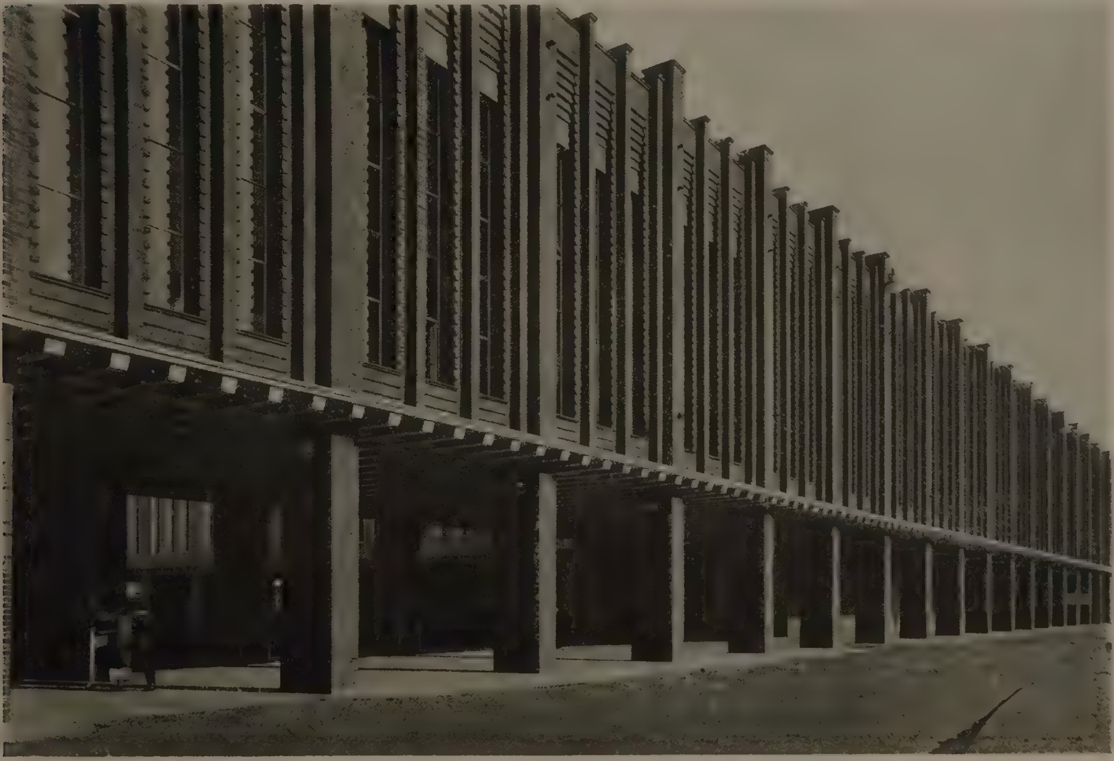


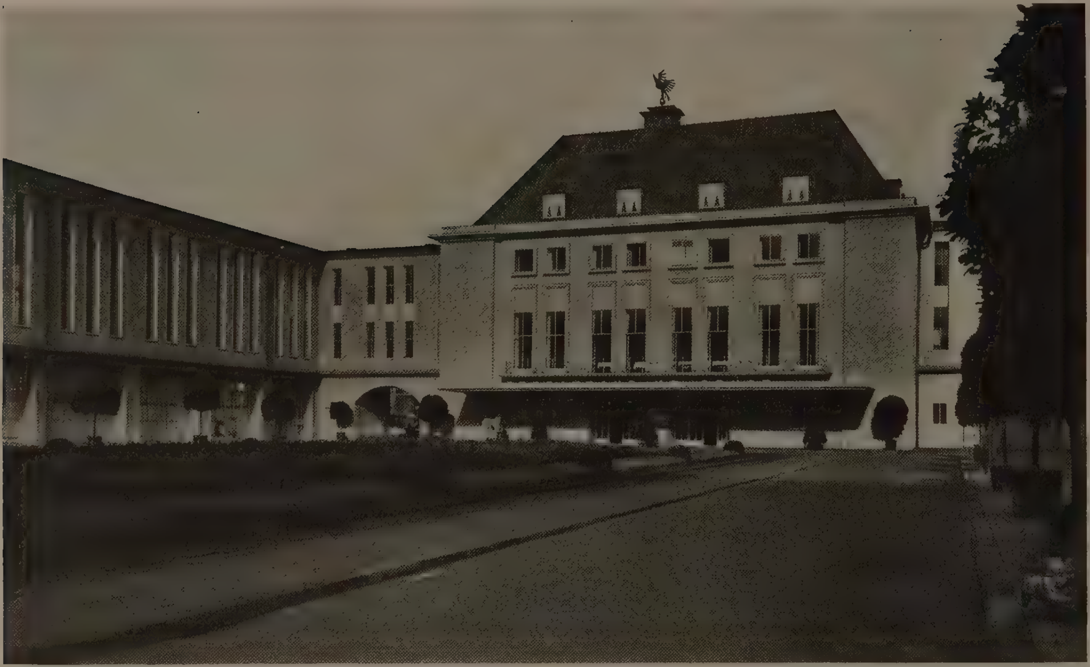
Exhibit of the Soviet Republic



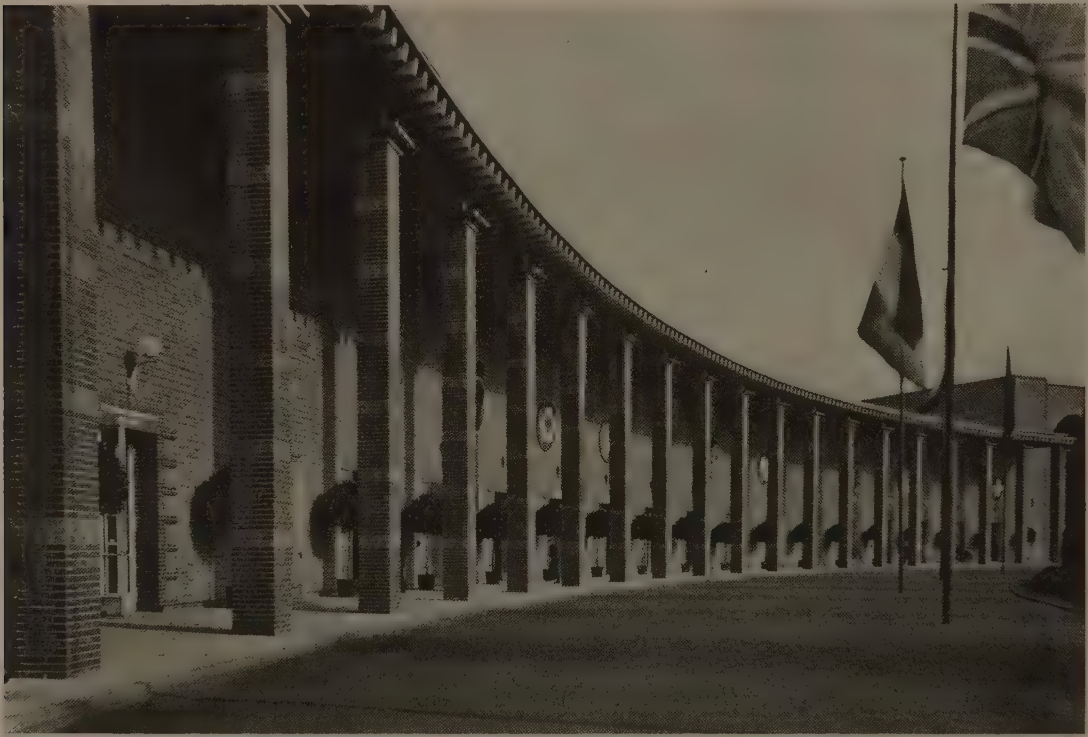
Main exhibition building



INTERNATIONAL PRESS EXHIBITION, 1928, AT COLOGNE

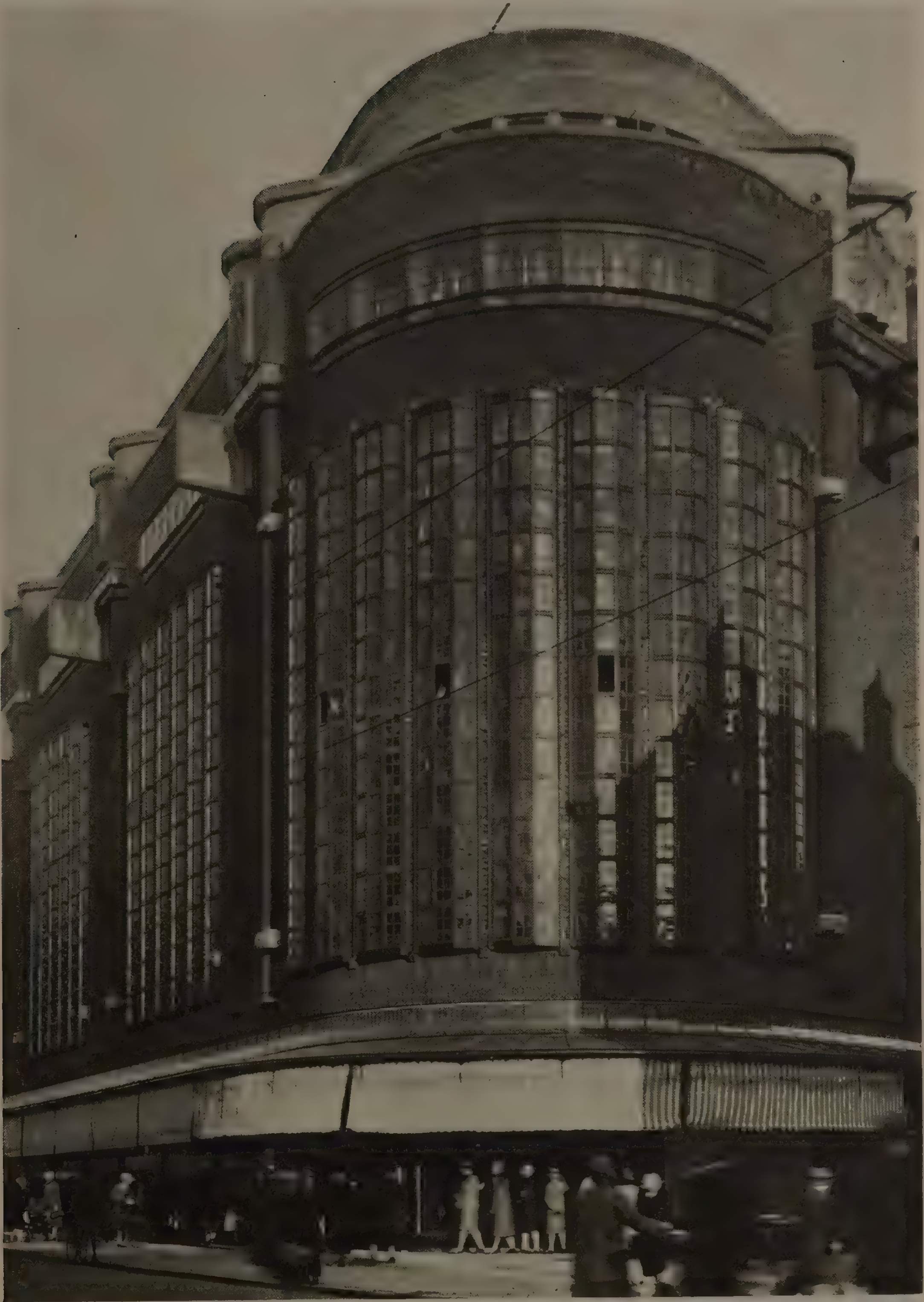


Rhine Restaurant

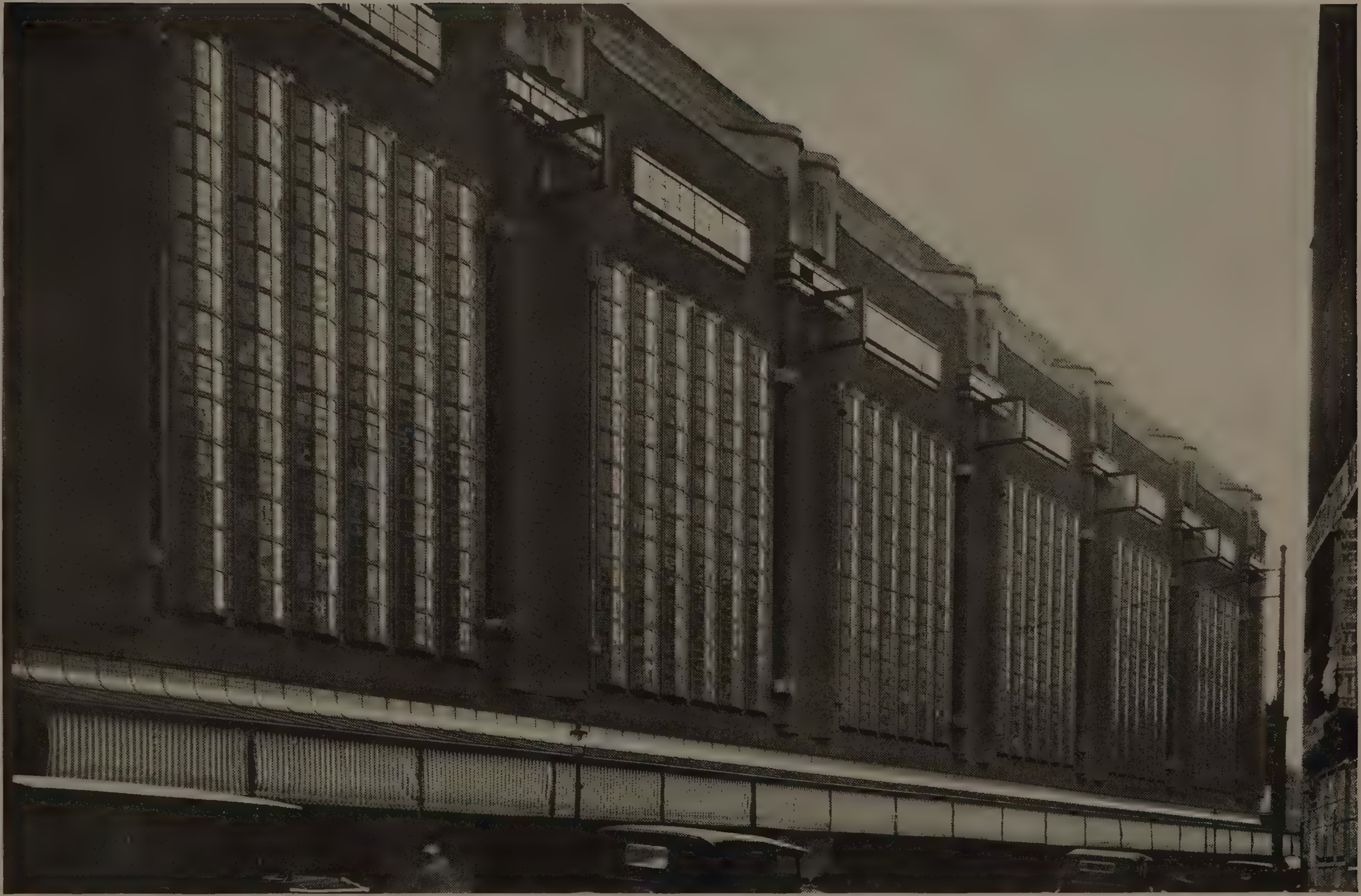


Hall of Nations

INTERNATIONAL PRESS EXHIBITION, 1928, AT COLOGNE

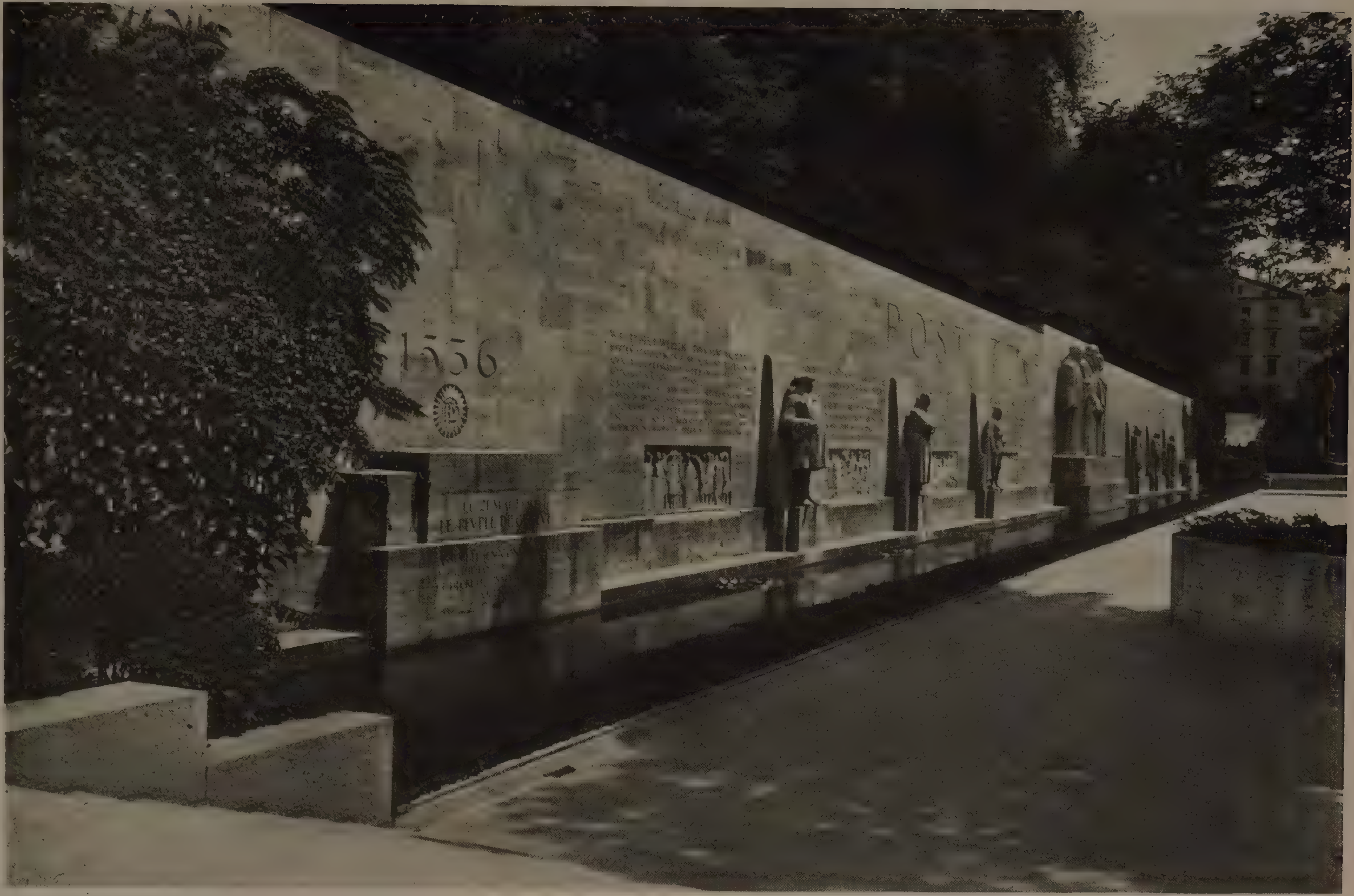


Department-Store, The Hague, Holland P. Kramer, Architect

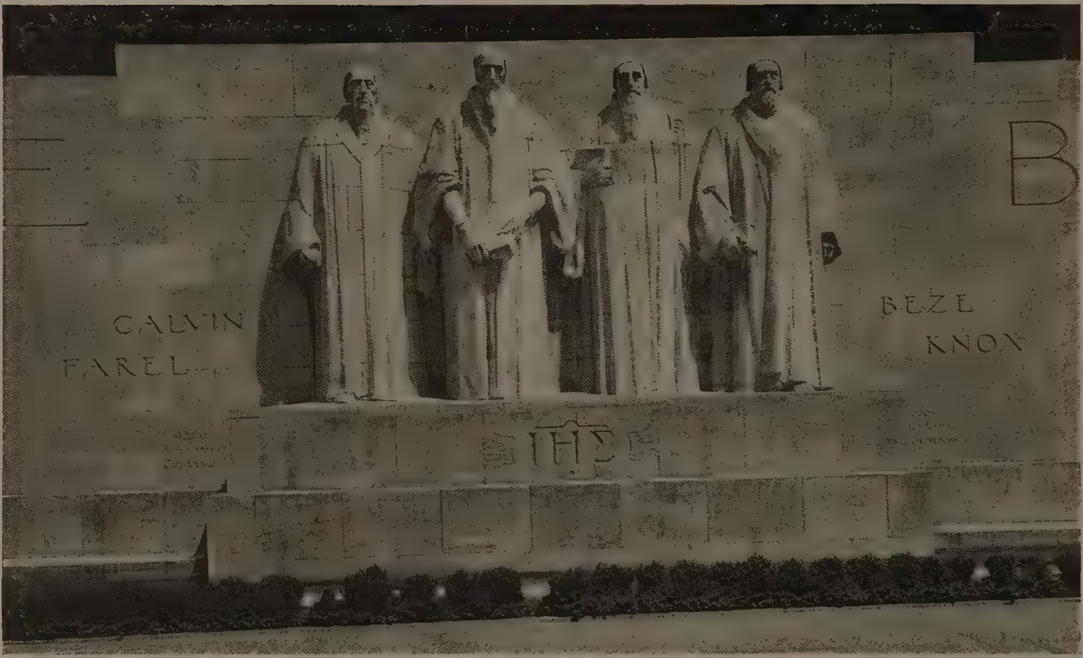


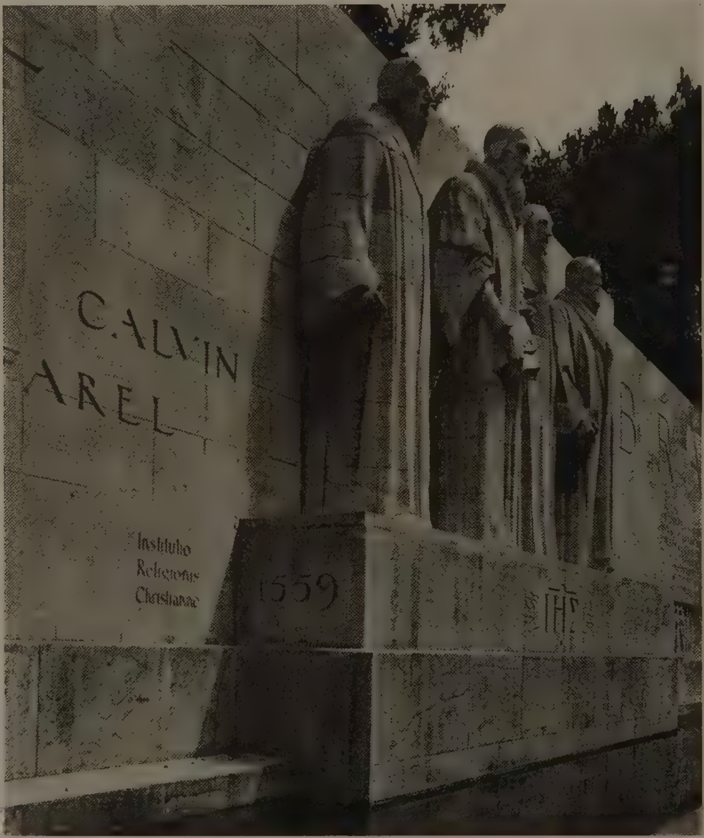
Department-Store, The Hague, Holland

P. KRAMER, ARCHITECT



REFORMATION MONUMENT, GENEVA, SWITZERLAND LA VERRIÈRE AND TAILLENS, ARCHITECTS; HENRI BOUCHARD AND P. LANDOWSKI, SCULPTORS





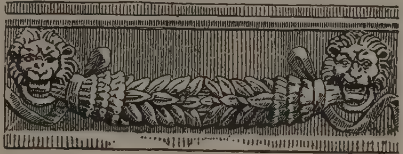
REFORMATION MONUMENT, GENEVA, SWITZERLAND

Inaugurated in 1909 and recently completed

LA VERRIÈRE AND TAILLENS, ARCHITECTS; HENRI BOUCHARD AND P. LANDOWSKI, SCULPTORS

Pigments in Portland Cement

By James E. Foster



FOR many years the architect has known in a general way that pigments will color Portland cement. His knowledge has, however, been very general—so much so, in fact, that he has given comparatively little attention to the uses to which he might put concrete as a decorative medium. He knew the material had definite structural qualities, and he was content to employ it for its value to him as an engineer.

Had he wished to use mineral pigments with cement, he would have found it difficult to secure any exact information on this subject. The tinting value of different pigments, the permanence of colors secured with them, their effect on the strength of concrete—all matters of vital interest to him—would have been question-marks in his mind. He might have asked for information on these subjects, but the answers he would have received would have been too vague to be of much value.

Fortunately, this situation has changed. The pigments' relations to Portland cement are no longer matters of opinion, but are definitely known, as the result of a two-years' investigation of them by Raymond Wilson, associate chemist, Research Laboratory of the Portland Cement Association, Chicago.

Mr. Wilson based his study on 264 commercial pigments and confined his tests to the following major divisions:

1. The chemical composition of commercial pigments.
2. The exact values of different pigments as coloring media.
3. The relations between chemical composition of pigments and the color permanence of mortars in which they are used.
4. The effect of pigments on compressive strength of mortar.

Of the pigments studied, 69 per cent were either wholly or partially iron oxides, and more than 77 per cent were made up of oxides of iron, manganese and chromium. In each class of hues, with the exception of blue, there was at least one group of oxide pigments.

The colors of the mortars before and after weathering were described according to the Munsell Notation. By this system a color is considered in terms of hue, value, and chroma. Hue is the property of a color which distinguishes red from blue, yellow, orange, etc. Value describes the lightness or darkness of a color, and chroma is its intensity. As both value and chroma are subjected to numerical description, it was possible for Mr. Wilson to determine exactly the effects of different pigments as coloring media.

Several motars were used in these tests, varying from a mixture of water and cement to a mortar made with one part cement to five parts sand. With each of these mortars a quantity of pigment bearing a uniform relation to the amount of cement was used. The resulting colors were so nearly uniform that one may state as a general rule that color is determined by the ratio of pigment to cement and not by the ratio of pigment to mortar. It is because of this that admixtures are described by the relations they bear to cement. A 50 per cent admixture, for example, is one weighing half as much as the cement in the mortar in which the two are embodied. A 20 per cent admixture weighs one-fifth as much as the cement. In all cases, the percentage refers to the relation which the admixture's weight bears to that of the cement.

The only pigments in which the character of the mortar had a marked effect on the ultimate color were the blues. Mr. Wilson explains this phenomenon by the probability that some of the pigment is utilized in coloring the finer portion of the sand. As the sand used in his tests was of a hue complementary to that of the pigment, it is possible that the blue was affected more than the other pigments.

The proportion of water had little effect on the hue and chroma of colored mortars, but produced some variations in value. Wet mortars were somewhat lighter than those which might be described as very dry.

Mr. Wilson found that as a general rule an increased use of pigments had little effect on the hue of the mortar once the colors had been established. This applies both to white and to gray Portland cement. In general it may be said: Successive increases in the quantity of pigment intensify the color, but not in direct proportion to the amount of pigment used.

Beyond this, however, no general rule can be given for the coloring values of pigments. The reason for this is that each pigment is very largely a law unto itself. Yellow, red, green, and black pigments, for example, produced practically the same effects when they represented 35 per cent of the weight of the cement as when they were equal to 50 per cent of the cement. Ultramarine blue, however, did not apparently reach its limit when it was used as a 50 per cent admixture.

Different pigments for a given color vary greatly in effectiveness. One unit by weight of carbon black was found to be approximately equal in the resulting color to five units of iron oxide black. The iron black was one of the best of its kind, while the carbon black was about the average.

In order to determine accurately the effect of exposure on different pigments Mr. Wilson made two identical discs with each pigment. One disc was stored in a dark room. The other was placed on a rack and exposed to the elements. As a result of these tests, he found that the following permanent colors can be secured with the types of pigments given:

Buff, yellow, red: iron oxide pigments.
Green: chromium oxide.
Blue: ultramarine blue.
Brown: iron oxide, or iron and manganese oxide pigments.
Black: iron oxide, manganese dioxide, carbon black, bone ash and the so-called mineral blacks.

Although the period of exposure is comparatively short it is long enough, according to Mr. Wilson, to give a fair indication of the qualities of the different pigments. He bases this statement on the fact that in all those pigments which failed under exposure, the failure was either complete or definitely indicated at the end of two months. It seems from this that failure in pigments of the types tested is not a gradual process but a very definite one, taking place during the early stages of exposure.

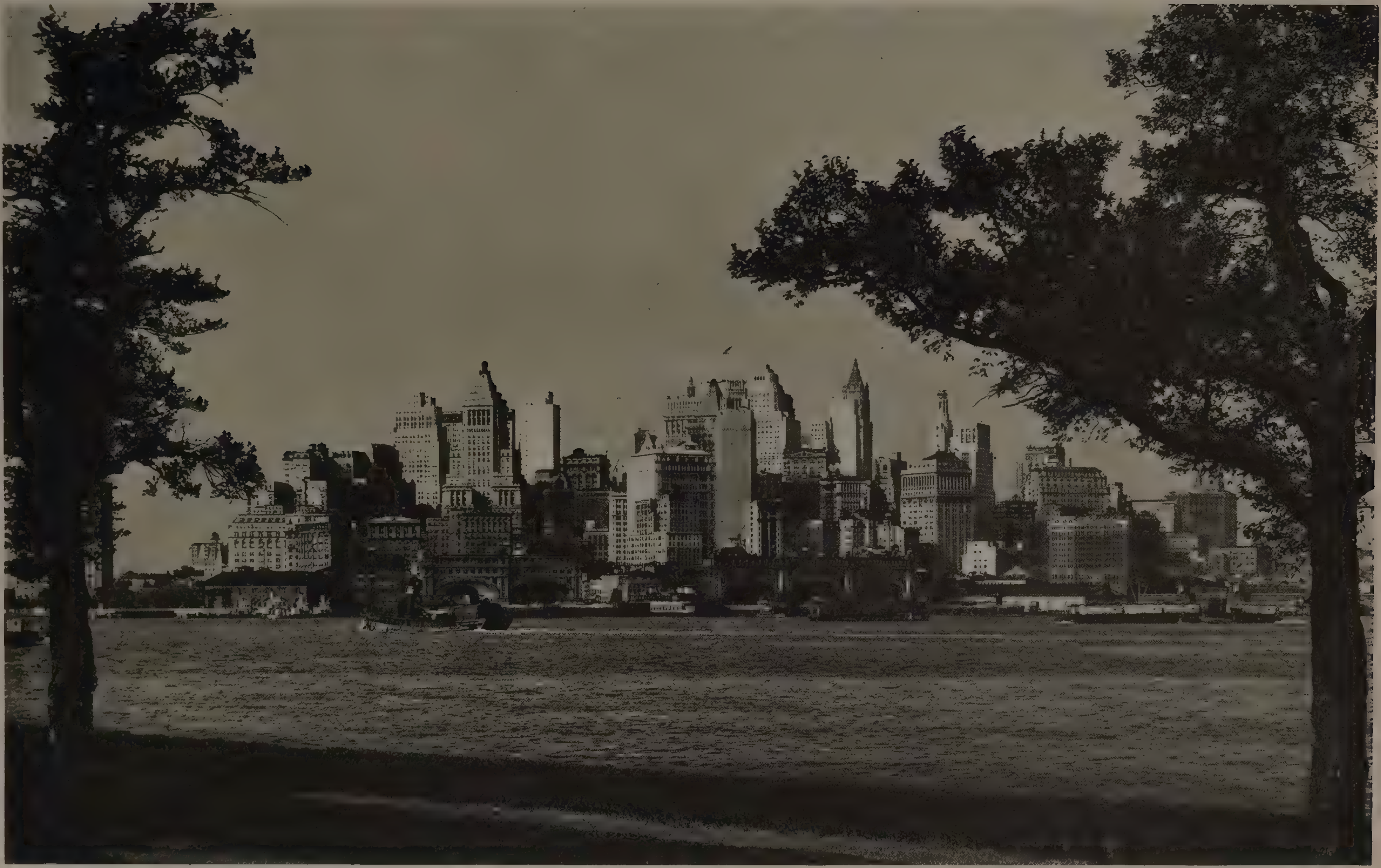
In general, the use of mineral oxide pigments had no detrimental effect on the resulting strength of the mortar. In the cases of yellow, red, and green pigments, admixtures in excess of 20 per cent were required to produce reductions in strength. Admixtures of ultramarine blue actually increased the strength of the mortar.

With most pigments a small admixture increased the strength of the mortar slightly while the use of a large quantity caused a strength reduction. This phenomenon may be explained by the fact that the small admixtures absorbed a certain proportion of the water and as a consequence reduced the mixing water used. Since the strength of concrete and mortar is in inverse proportion to the ratio of water to cement this would result in increased strength. The decreased strength accompanying the use of large proportions of admixtures was probably due to the fact that the mortars containing these large quantities required an increased amount of water to secure workability. It is probable that the pigment itself has little effect on the strength of the mortar except in so far as it modifies the ratio of water to cement.

About the only pigment which produced permanent color results that were accompanied by a reduction in compressive strength was the carbon black. An admixture equal to 2 per cent of the weight of the cement reduced the strength of the mortar about 15 per cent and a 4 per cent admixture resulted in a strength reduction of 30 per cent. An admixture of iron oxide equal in pigment value to the 2 and 4 per cent admixtures of carbon black did not cause strength reductions.

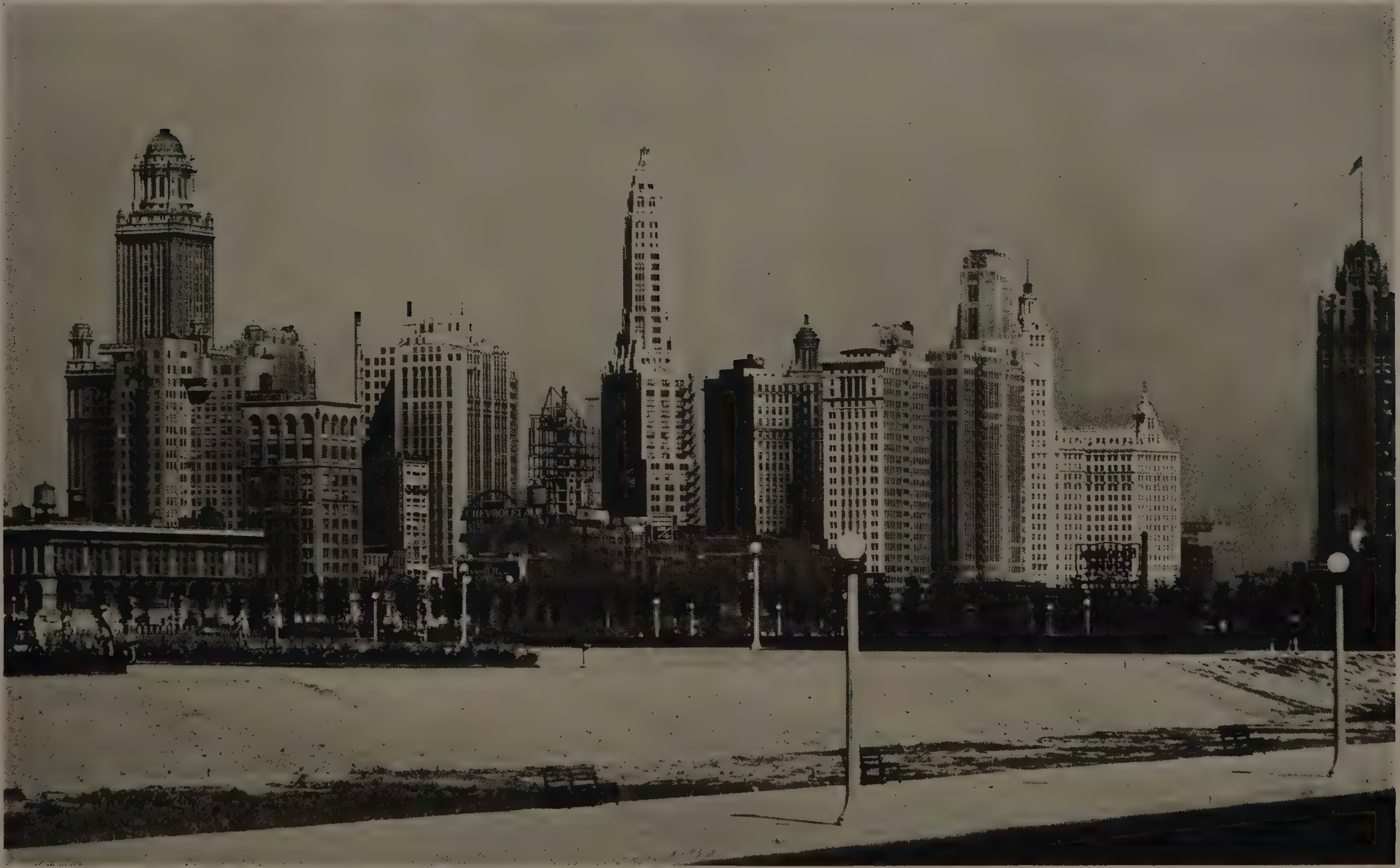
The limits fixed by structural requirements are well above those set by economic considerations. The law of diminishing returns in its operations on pigments makes it inadvisable to use an admixture of more than 10 per cent, except where very intense colors are desired. With the greater majority of the pigments, an admixture of 10 per cent can be set as a maximum for all practical purposes. As this is but half the amount required to cause a loss of strength in a large proportion of the pigments, the designer's desire for color, either in stucco or in mortar, need not be hampered by structural considerations.

The establishment of definite working principles in conjunction with pigments opens new opportunities to the architect. It enables him to work with certainty in fields which formerly were dominated by guesswork, to build color into his structures with the definite knowledge that his work is in accordance with sound engineering principles.



By Ewing Galloway, N. Y.

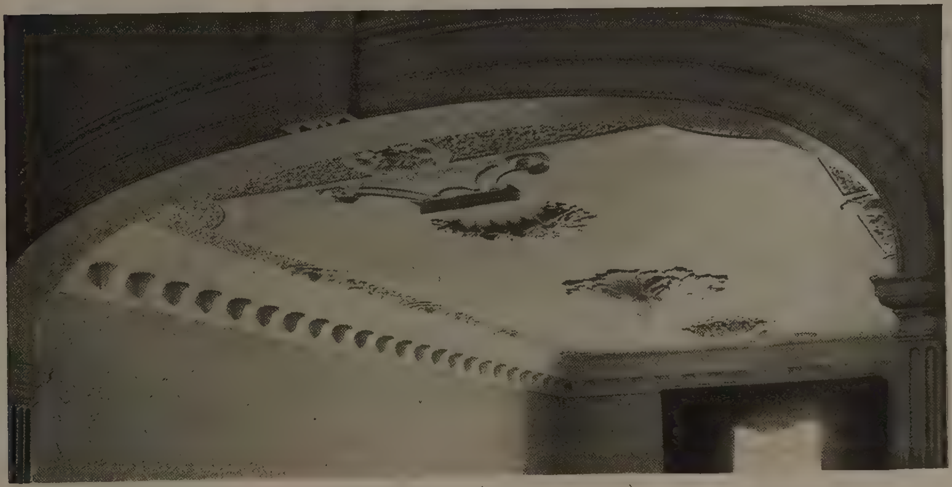
THE NEW YORK SKYLINE FROM A NEW ANGLE—PHOTOGRAPHED FROM THE SHORE OF GOVERNOR'S ISLAND



By Ewing Galloway, N. Y.

The Rapidly Changing Skyline of Chicago, Taken from Grant Park, North of the Art Institute

ARCHITECTURE'S PORTFOLIO OF DECORATIVE PLASTER CEILINGS



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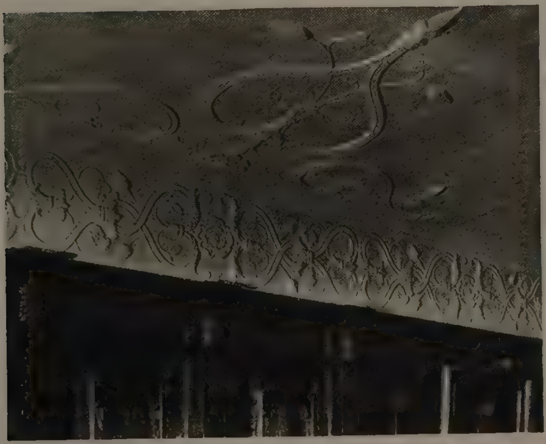

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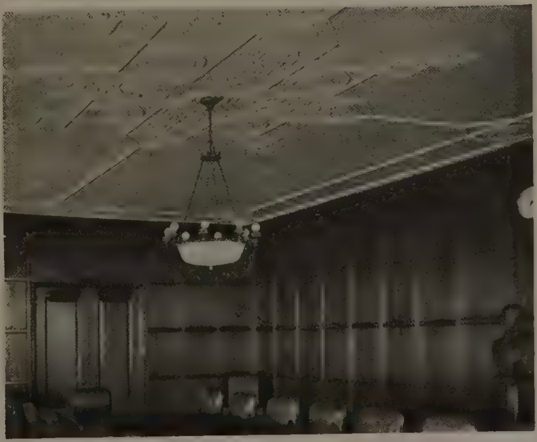

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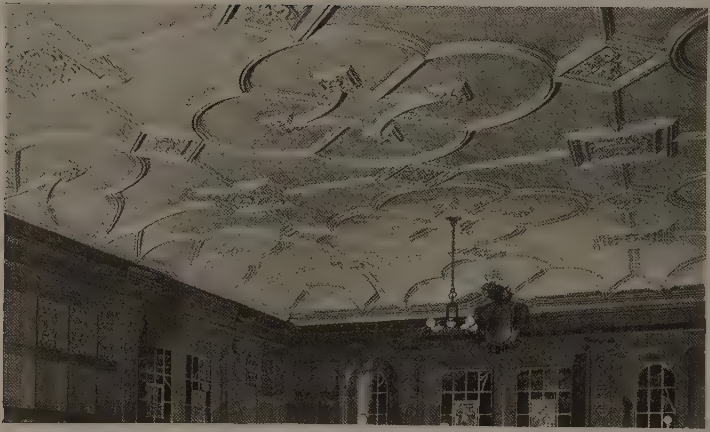
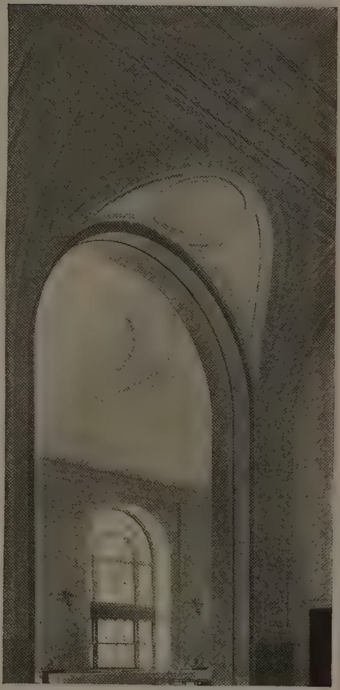


HENRY RAEDER, N. MAX DUNNING & GEO. C. NIMMONS & CO.



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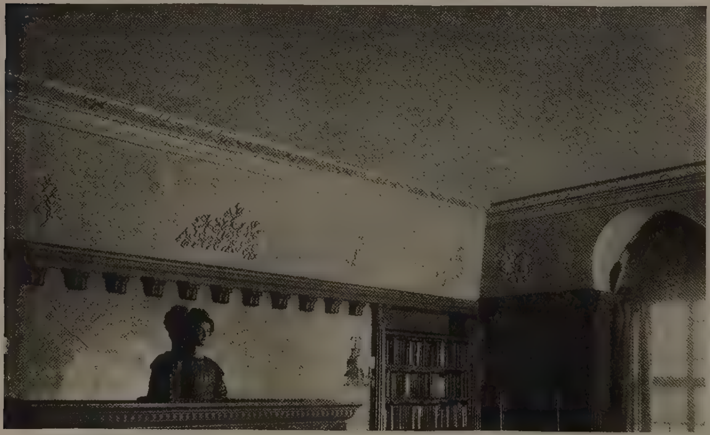
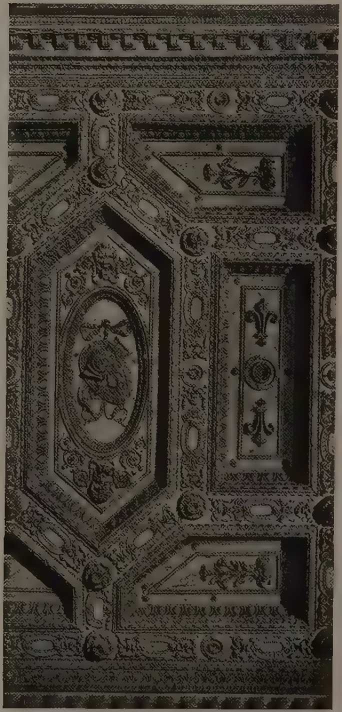
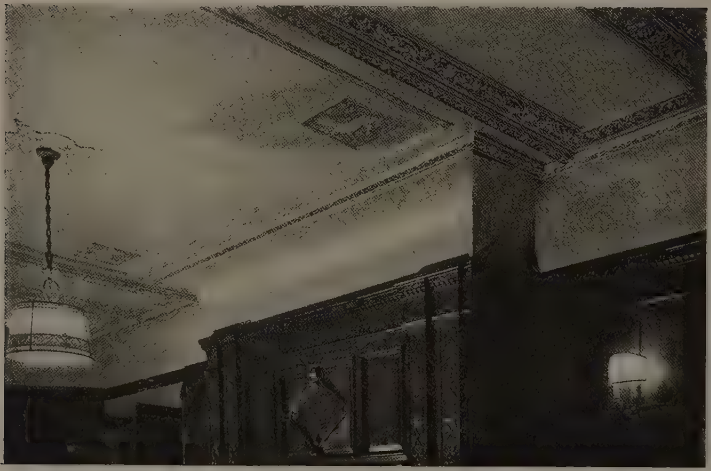


LAURENCE F. PECK

FARNESE PALACE ROME





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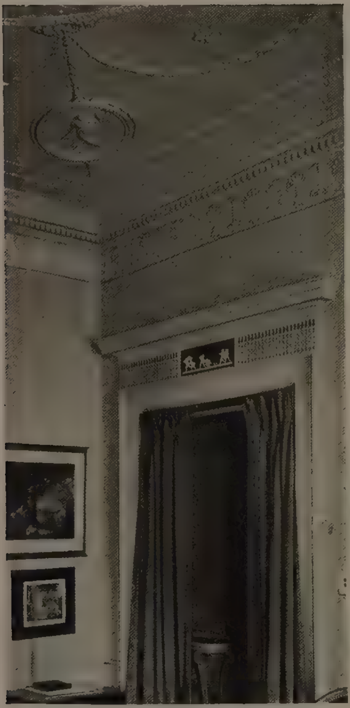

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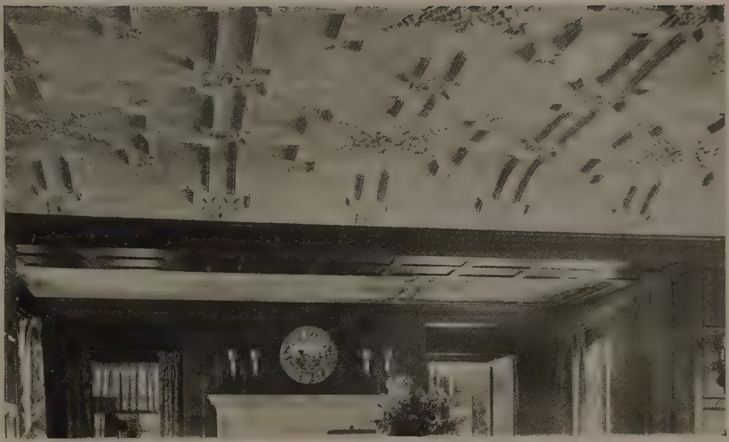

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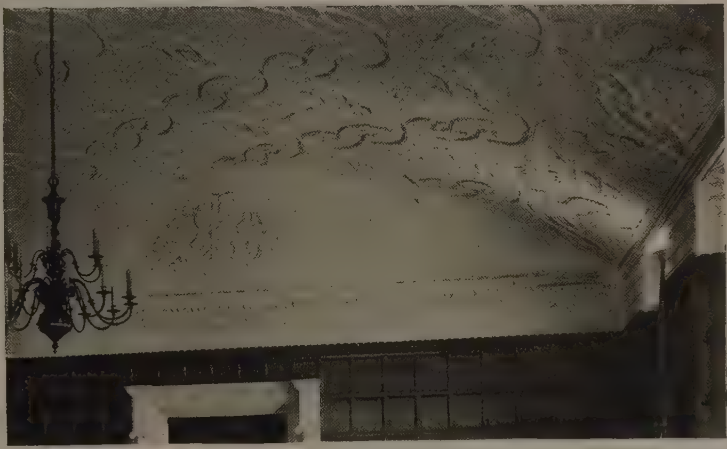

YORK & SAWYER

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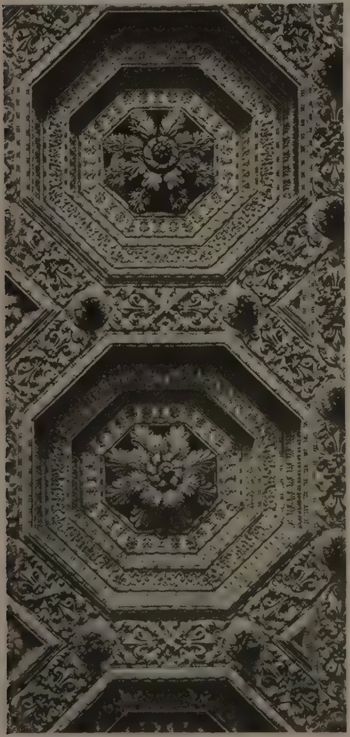

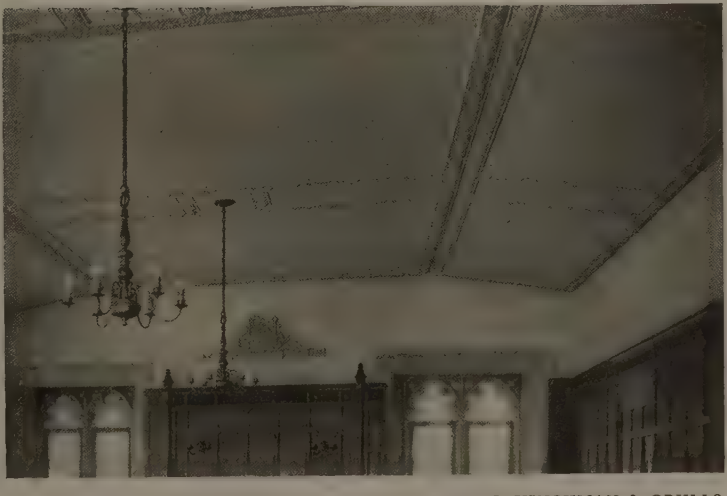

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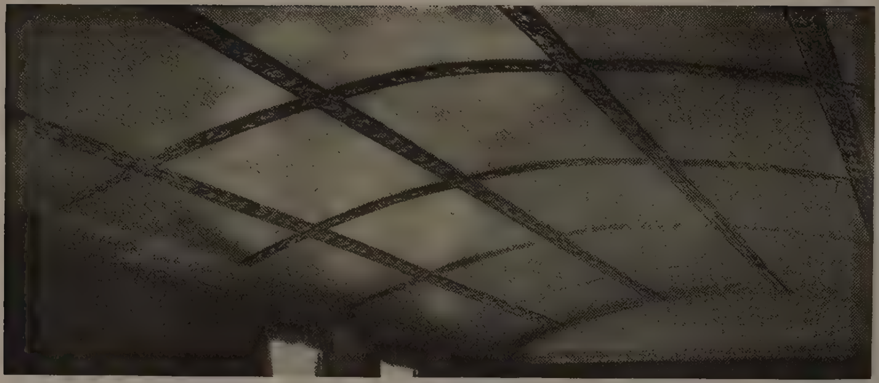
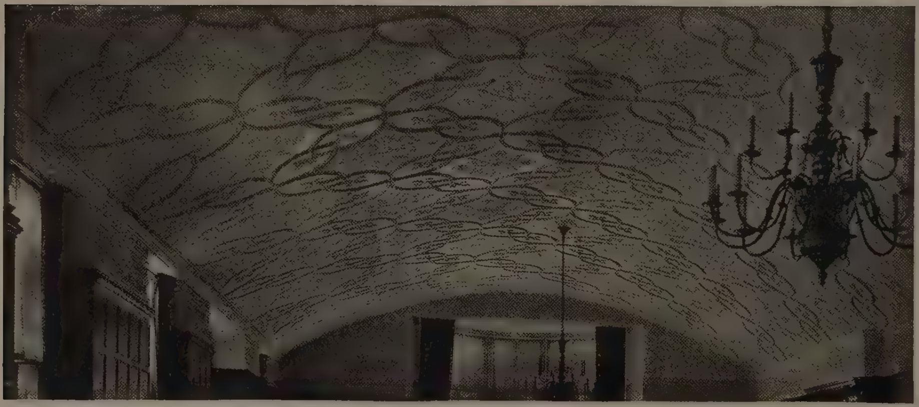


LINN KINNE
AND
BAGG & NEWKIRK



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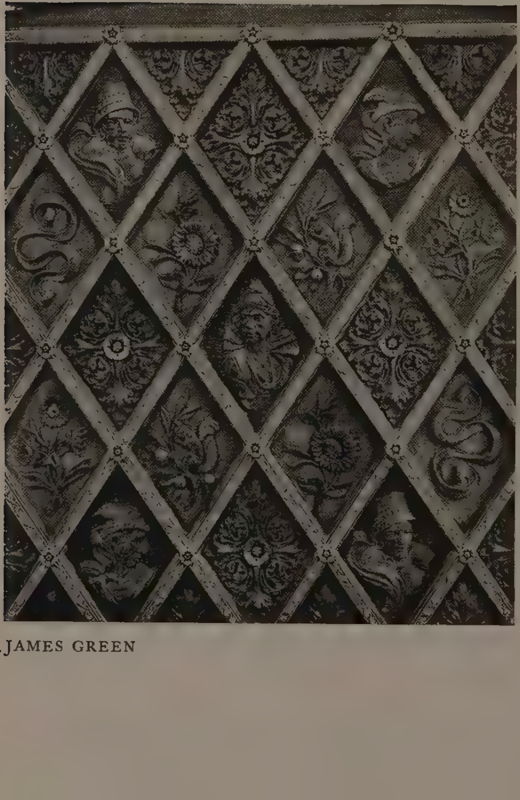

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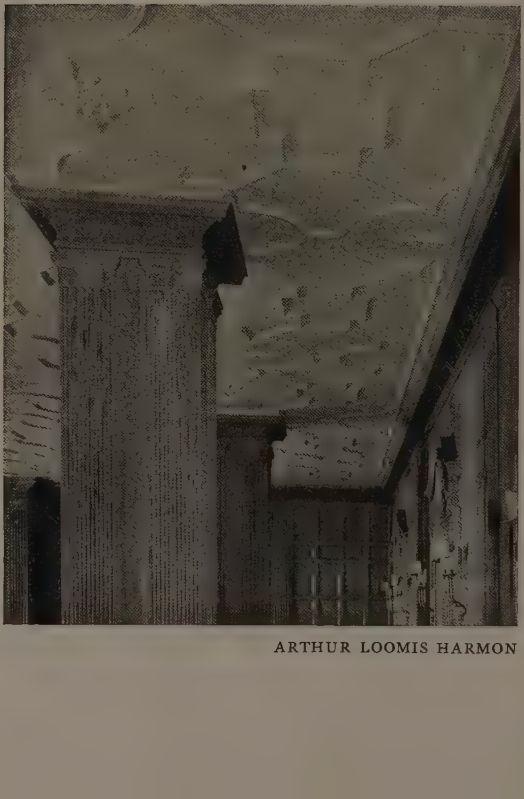

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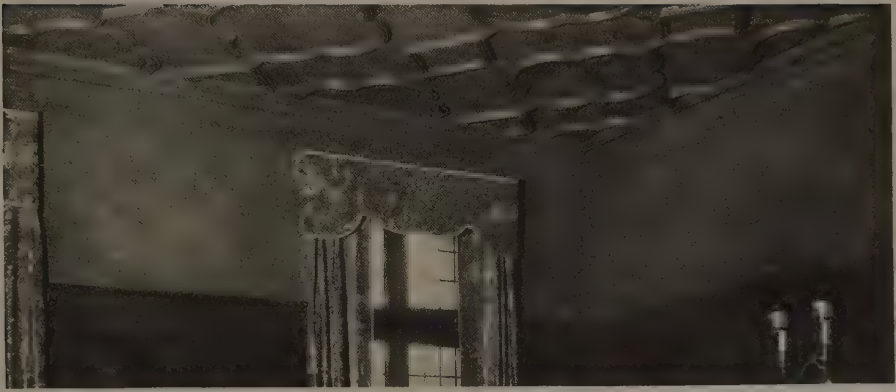

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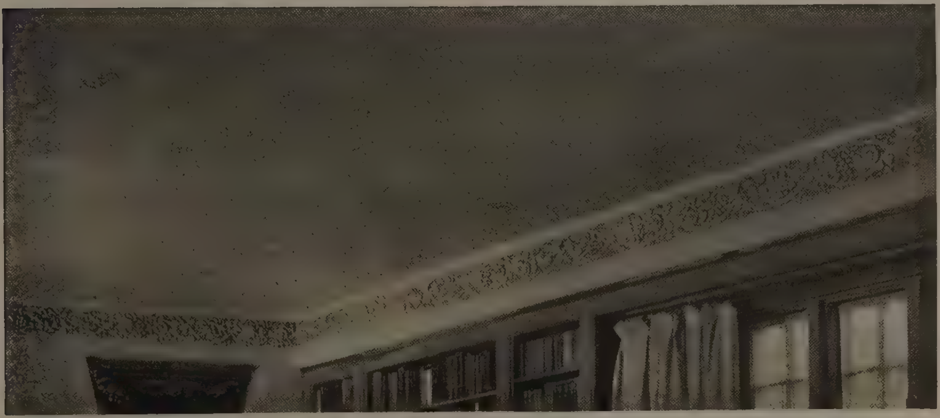

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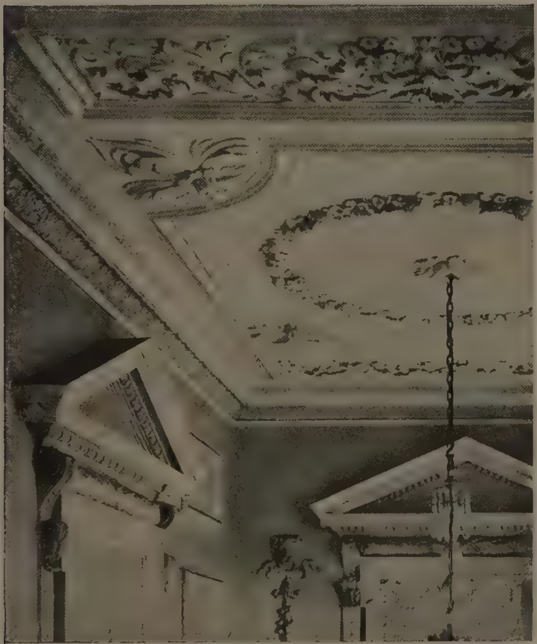

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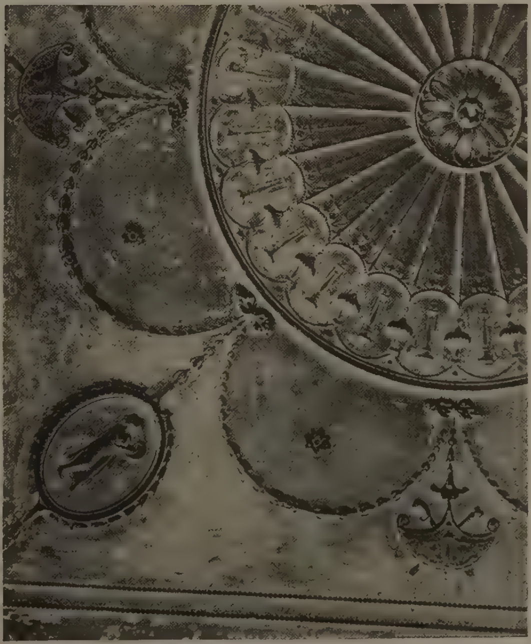

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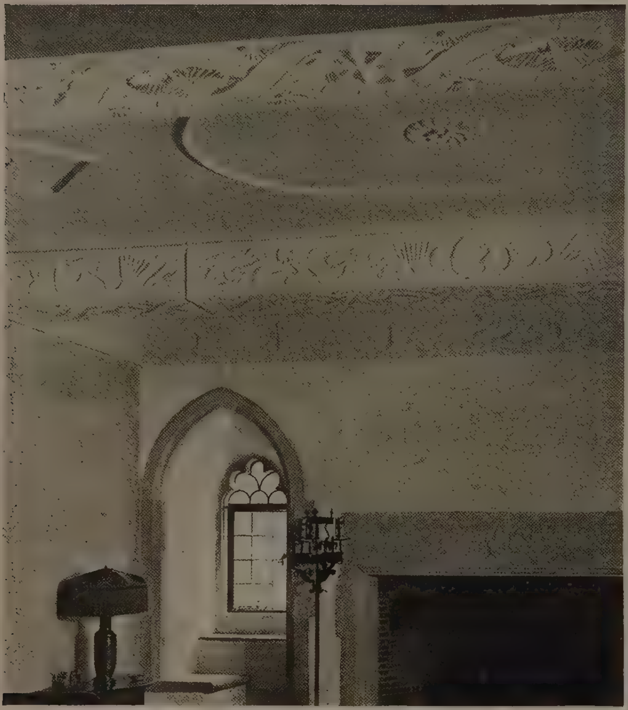

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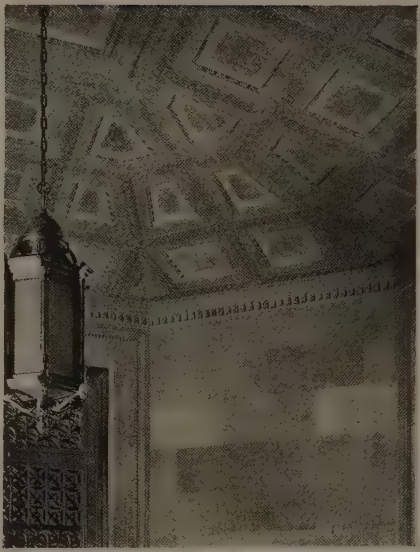

YORK & SAWYER

SMITH,
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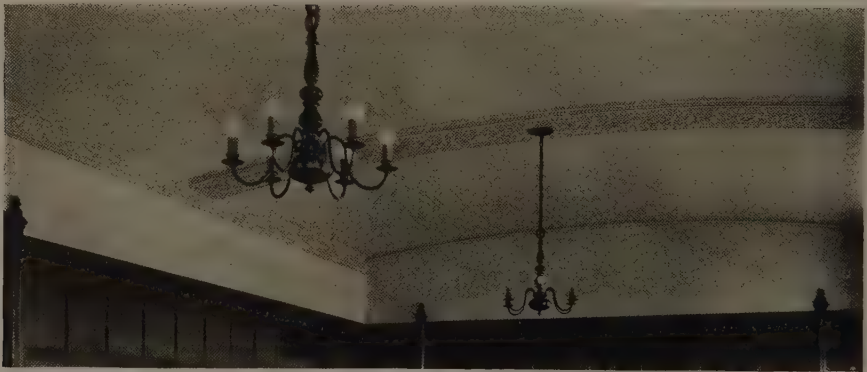
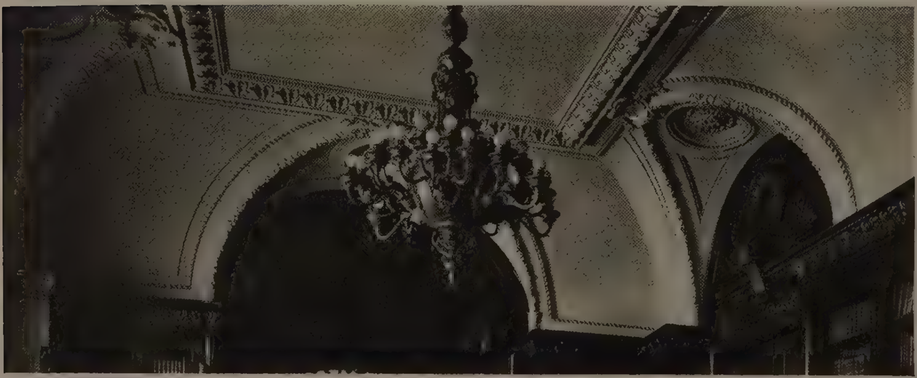
& GRYLLS





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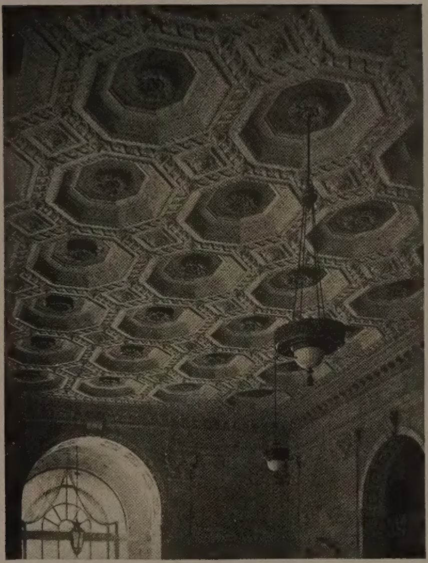

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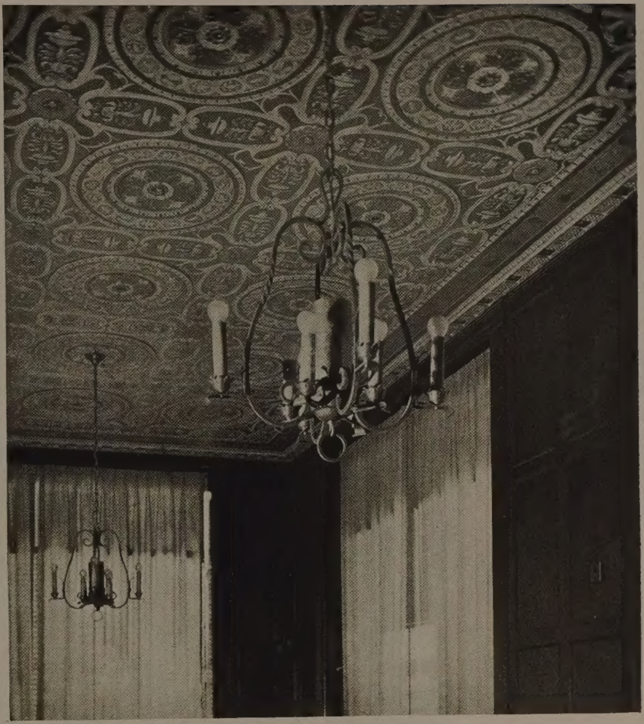

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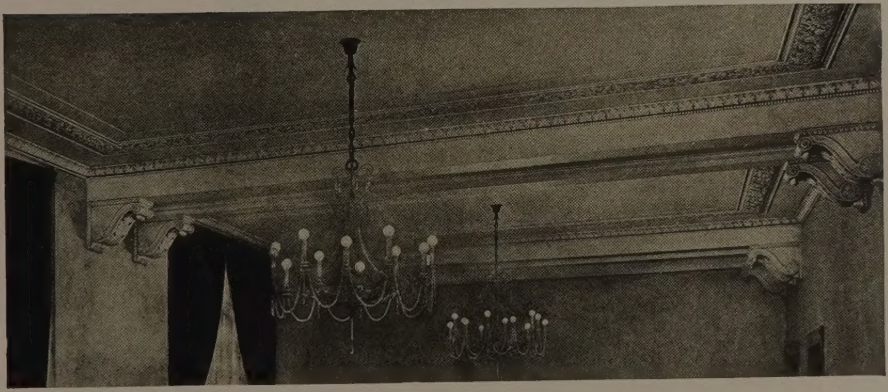

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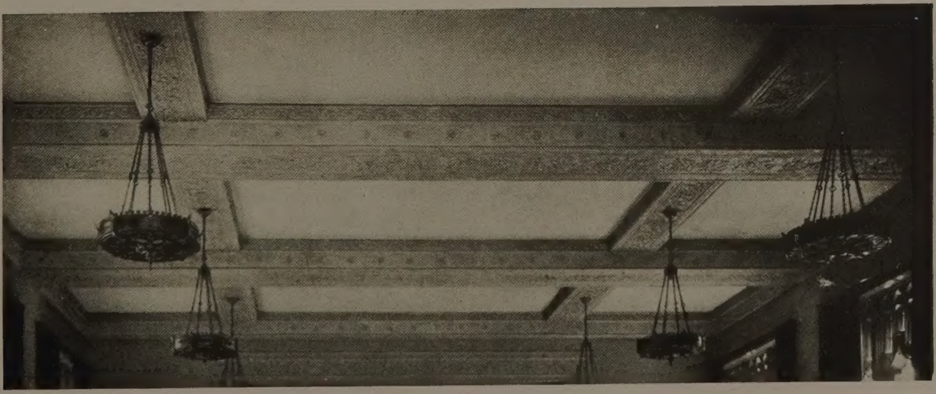

SMITH,
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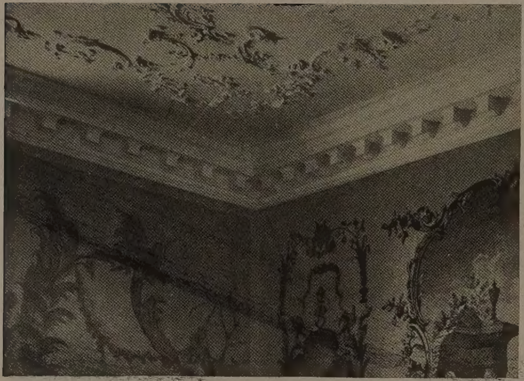
& GRYLLS



HARRINGTON
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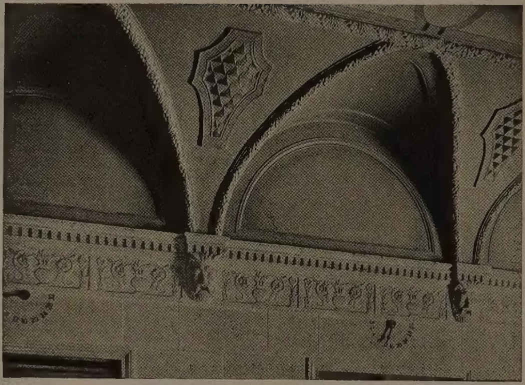

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HOLABIRD
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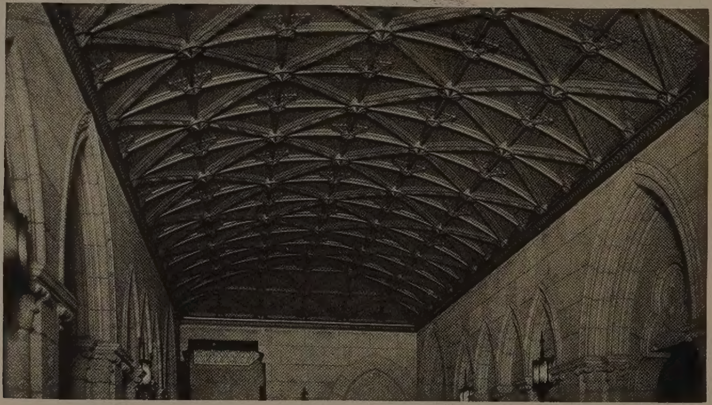

McKIM, MEAD
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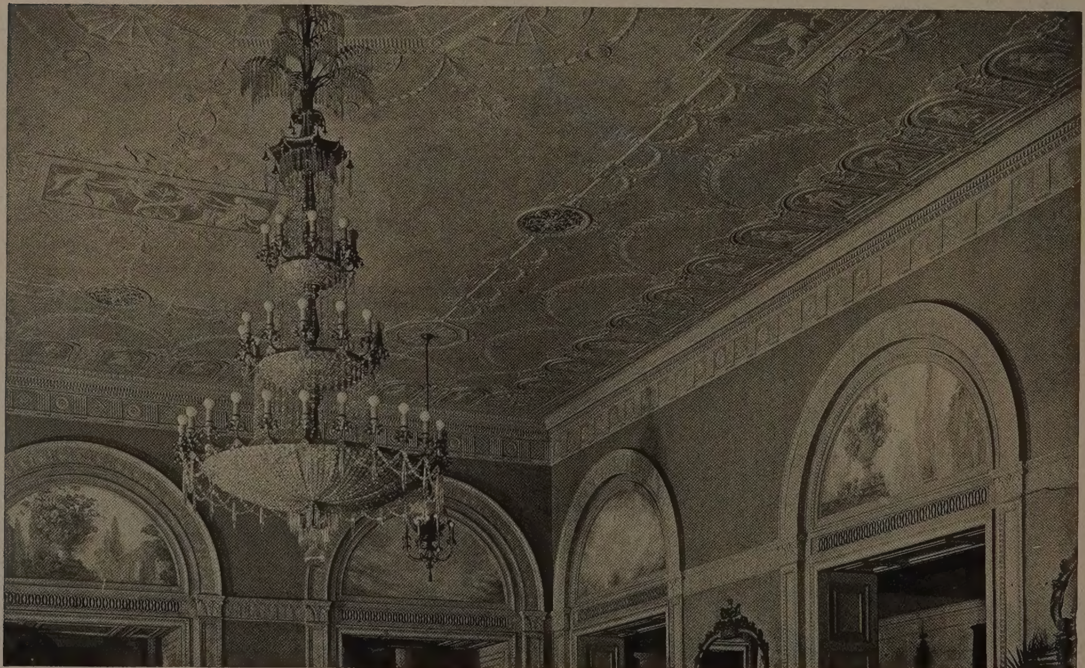

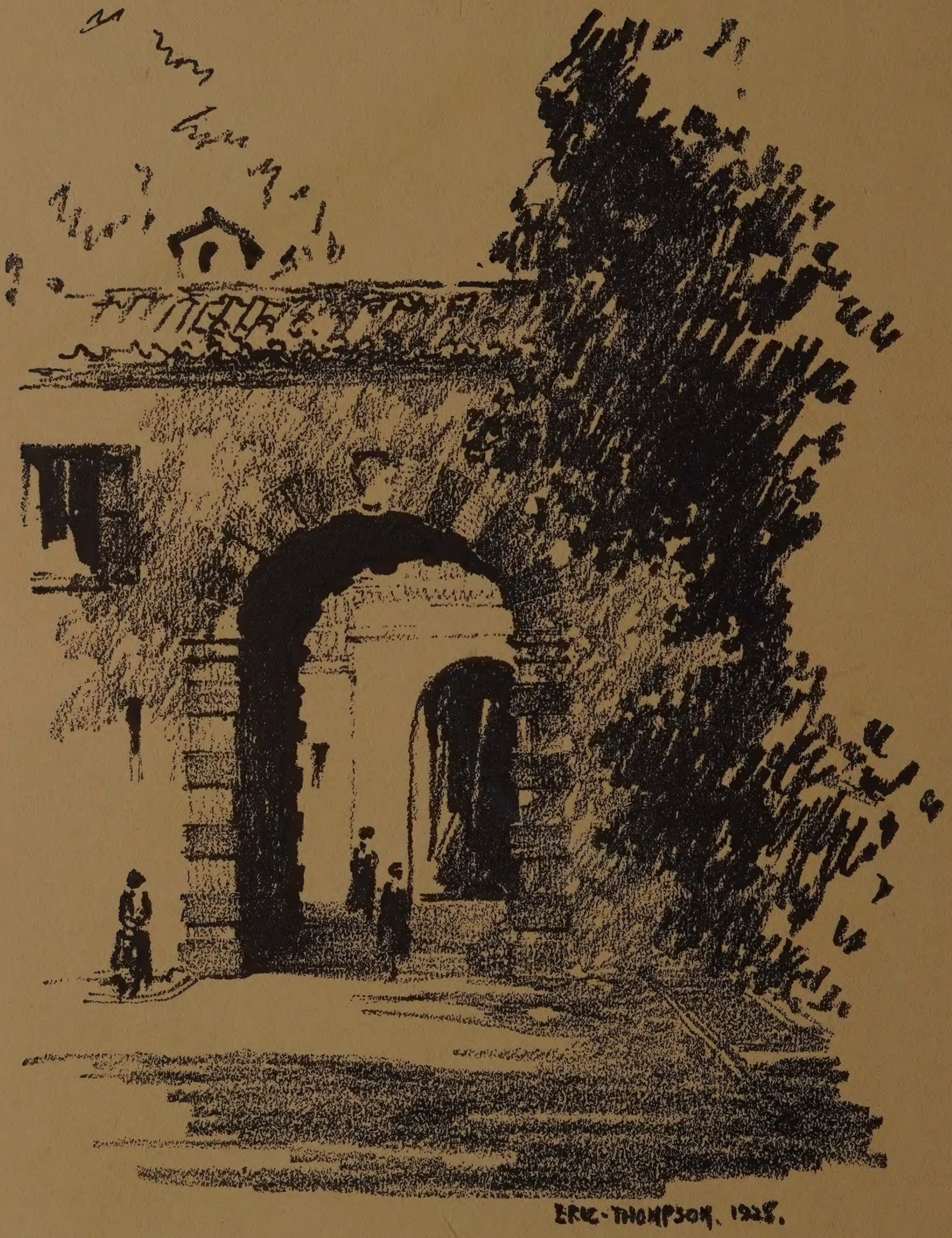
ERIC-THOMPSON. 1925.

ARCHITECTURE
CHARLES SCRIBNER'S SONS, *PUBLISHERS*

Entrance to the Deering Estate, Cocoanut Grove, Fla.
From the drawing by Eric Thompson